AlphaTheta

# Service Manual

CDJ-3000

ORDER NO.
**RRV4701**

## MULTI PLAYER

# CDJ-3000
# CDJ-3000-W

### THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

| Model | Type | Power Requirement | Remarks |
|---|---|---|---|
| CDJ-3000 | LSYXJ | AC 110 V to 240 V | |
| CDJ-3000 | AXJ | AC 220 V | |
| CDJ-3000 | UXJCB | AC 120 V | |
| CDJ-3000-W | AXJ | AC 220 V | |
| CDJ-3000-W | UXJCB | AC 120 V | |
| CDJ-3000-W | PXJ | AC 110 V to 240 V | |

### THIS SERVICE MANUAL SHOULD BE USED TOGETHER WITH THE FOLLOWING MANUAL(S).

| Model | Order No. | Remarks |
|---|---|---|
| CDJ-3000, CDJ-3000-W | RRV4702 | SCHEMATIC DIAGRAM, PCB CONNECTION DIAGRAM, PCB PARTS LIST |

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# SAFETY INFORMATION

**This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.**
**Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.**

**Caution**
Since the fuse may be neutral of the mains supply, disconnect the mains to de-energize the phase conductors.

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# 1. SERVICE PRECAUTIONS

## 1.1 NOTES ON SOLDERING

For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.
Do NOT use a soldering iron whose tip temperature cannot be controlled.

## 1.2 NOTES ON REPLACING

The part listed below is difficult to replace as a discrete component part.
When the part listed in the table is defective, replace whole Assy.

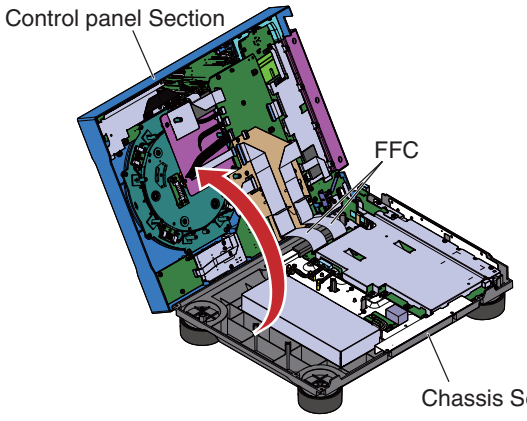
| Assy Name | Parts that is Difficult to Replace | | | |
|---|---|---|---|---|
| | Ref No. | Function | Part No. | Remarks |
| MAIN Assy | IC1001, IC1003 | DC/DC CONVERTER | BD9328EFJ | IC with heat-pad |
| | IC1201 | DC/DC CONVERTER | TPS53515RVE | IC with heat-pad |
| | IC1401 | PMIC | BD9571MWF | IC with heat-pad |
| | IC1801 | MAIN CPU | R8A774A0HC01BG@V | BGA |
| | IC2401, IC2601 | LPDDR4 | K4F8E3S4HB-MFCJ | BGA |
| | IC2802 | eMMC | THGBMJG6C1LBAU7@V | BGA |
| | IC3001 | DC/DC CONVERTER | MM3543BH | IC with heat-pad |
| | IC3602 | USB-B HUB | RTS5412E-GR | IC with heat-pad |
| | IC3802 | USB-LAN | RTL8153B-VB-CG | IC with heat-pad |
| | IC4001 | LAN-HUB | RTL8367SB-CG | IC with heat-pad |
| | Q1401, Q1402 | FET | IPG20N04S4L-08 | Transistor with heat-pad |
| LCDB Assy | IC6001 | LCD POWER IC | R1290K103A | IC with heat-pad |
| | IC6004 | LCD BACKLIGHT DRIVER | IS31BL3555-ZLS4 | IC with heat-pad |
| PNLA Assy | IC7203 | RGB LED CONTROLLER | IS31FL3236AQFLS2 | IC with heat-pad |

## 1.3 SERVICE NOTICE

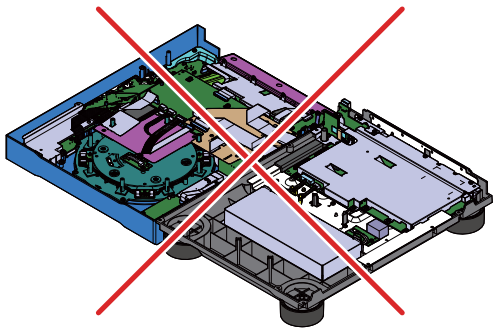
### ■ Caution of the removal of the Control panel Section

The two FFCs that connect between the Control panel section and the Chassis section are short in length.
Therefore, they cannot be opened 180 degrees with the FFCs still connected.
Be careful not to damage the FFC or the connector when removing the Control panel section or diagnosing it.

Good




NG



## ■ About the Flash (IC2802) and USB-LAN Conversion IC (IC3802) in the MAIN Assy

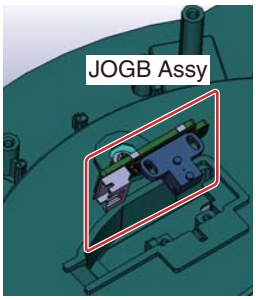
Replacement of the Flash (IC2802) and USB-LAN Conversion IC (IC3802) in the MAIN Assy is not possible during service, because writing of the MAC address on the production line is required and USB-LAN Conversion IC (IC3802) has unique ID.
Therefore, the Flash (IC2802) and USB-LAN Conversion IC (IC3802) are not supplied as a service part.
If the Flash (IC2802) and USB-LAN Conversion IC (IC3802) are defective, replace the whole MAIN Assy.
After replacing the the MAIN Assy, writing of the serial number of the unit is required.
For details on how to write the serial number, see "8.3 WRITING THE SERIAL NUMBER OF THE UNIT."

## ■ About the Fan motor

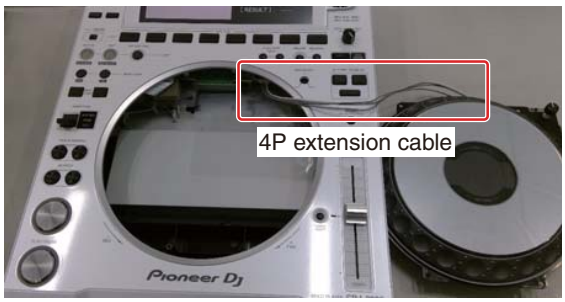
This product has Fan motor.
This fan is controlled with the three thermometers in MAIN CPU (IC1801), which automatically switch the rotation speed (Off/Low/High).
If the thermometer doesn't detect a very high temperature, Fan doesn't start to rotate.
Fan's rotating status can be checked in Service mode.
Use the above information in addition to "THERMOMETER CHECK PAGE" information of Service mode when replacing Fan or making a diagnosis.
When repairing the product, always remove Cover of the bottom to check and clean with air blow, etc. the vents for dust.
If it is heavily dusty, remove Fan motor and Stay, and clean it.

## ■ About Jog dial rotation load adjustment

When performing the Jog dial rotation load adjustment, you must remove Jog dial section from Control panel section to operate Adjust plate.
After removing it, connect PNLB Assy and JOGB Assy with 4P extension cable before performing the adjustment.
Remove JOGB Assy from Jog dial section and replace it with 4P extension cable and reinstall it.
After the adjustment is complete, remove JOGB Assy and reinstall it using the cables that were used before disassembly.
After Jog dial section is installed and the product is reassembled, the Jog dial rotation load measurement is performed again to confirm that there are no problems.




Bottom view

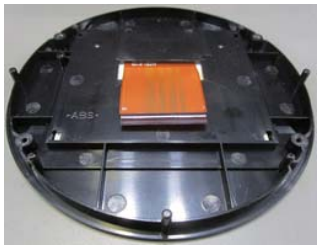



## ■ About the replacement of the jog LCD

As shown in the figure below, the cover and the jog LCD are fixed with double-sided tape.

Surface side

Back side

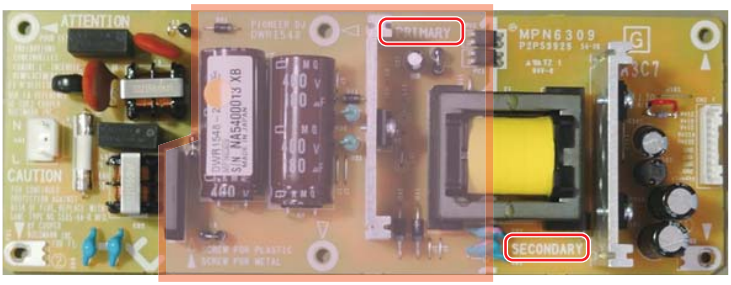


If you remove the parts from the double-sided tape, the parts will be deformed.
So when replacing the parts, do not reuse them.
Replace the parts at the Assy unit of the service.

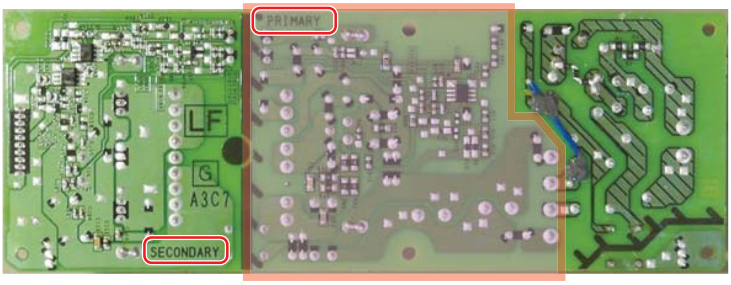
## ■ SW POWER SUPPLY Primary side electrical shock

The primary side of SW POWER SUPPLY remains voltage long time, and the primary solder side can be seen.
So if you touch the primary solder side, it is possible to receive an electrical shock.
There is the red area below where we tend to receive an electrical shock.
Be sure to discharge the voltage of primary side to avoid receiving the electrical shock.

**Electrical shock area of A-side.**

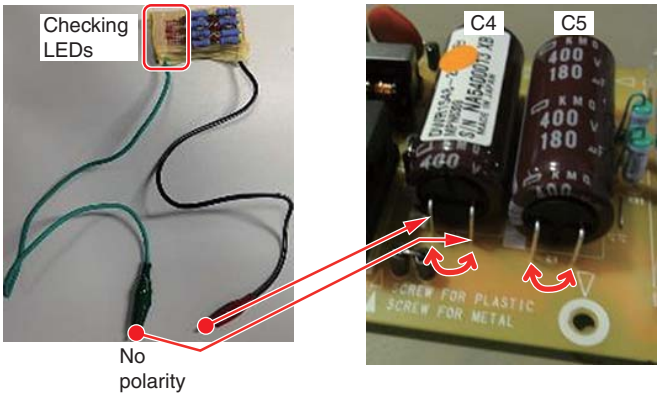



**Electrical shock area of B-side.**



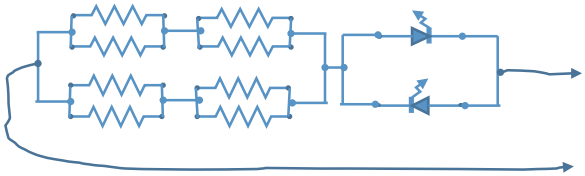

When discharging the above point, use the following discharge jig as needed.

While the charging voltage is left of both C4 and C5, either of checking LEDs turns on.
And if both of LED turns off, we can avoid receiving the electrical shock!!




The circuit of "discharge JIG" is shown below.

- Resister is all 10 kΩ (3W)
- Both of LED is LTL17KRH5D



When there is no above type LED, take measures the following method.
Step 1: After the power is turned off, wait 2 minutes.
Step 2: Connect the Register Jig and leave the unit as it is, for 10 seconds.

# 2. SPECIFICATIONS

Power requirements ..... AC 110 V to 240 V, 50 Hz/60 Hz
Power consumption ..... 40 W
Main unit weight ..... 5.5 kg (12.1 lbs)
Max. external dimensions .... 329 mm (W) × 453 mm (D) × 118 mm (H)
Tolerable operating temperature ..... +5 °C to +35 °C
Tolerable operating humidity ..... 5 % to 85 % (no condensation)

**Analog audio output (AUDIO OUT L/R)**
Output terminals ..... RCA terminal
Output Level ..... 2.0 Vrms (1 kHz)
Frequency response ..... 4 Hz to 40 kHz
S/N ratio ..... 115 dB
Total harmonic distortion ..... 0.0018 %

**Digital audio output (DIGITAL OUT)**
Output terminals ..... RCA terminal
Output type ..... Coaxial digital (S/PDIF)
Output level ..... 0.5 Vp-p (75 Ω)
Output format ..... 96 kHz, 24 bit

**USB downstream section (USB)**
Port ..... Type A
Power supply ..... 5 V/1 A or less

**USB upstream section (USB)**
Port ..... Type B

**LAN (PRO DJ LINK)**
Rating ..... 1000BASE-T

**SD memory card section**
File system ..... Conforming to SD standards
Max. memory capacity ..... 32 GB

**Main display**
Screen size ..... 9 inch

- The specifications and design of this product are subject to change without notice.

## ■ Accessories

- Power cord
  (AXJ: DDG1125)
  (LSYXJ: DDG1124)
  (UXJCB: DDG1123)
  (PXJ: DDG1124)
- Analog audio cable
  (XDE3045)
- Digital audio cable
  (DDE1154)
- LAN cable
  (DDE1141)
- Quick Start Guide
  (DRH1530)
- Precautions for use (Warranty)
  (CDJ-3000/LSYXJ: DRH1534)
  (CDJ-3000/AXJ, CDJ-3000-W/AXJ: DRH1535)
  (CDJ-3000/UXJCB: DRH1534)
  (CDJ-3000-W/UXJCB: DRH1611)
  (CDJ-3000-W/PXJ: DRH1611)
- Warranty (for some regions) *

* Only products in Europe.
Products in North America and Japan include warranty information in the “Precautions for Use”.

# 3. BASIC ITEMS FOR SERVICE
## 3.1 CHECK POINTS AFTER SERVICING

### Items to be checked after servicing

To keep the product quality after servicing, confirm recommended check points shown below.

| No. | Procedure | Check points |
|---|---|---|
| 1 | Confirm the firmware version in Service Mode. | The version of the firmware must be latest.<br>Update firmware to the latest one, if it is not the latest. |
| 2 | Confirm whether the customer complain has been solved. | The customer complain must not be reappeared.<br>Audio and operations must be normal. |
| 3 | Check the connection of each interface. | |
| | Playback data contained in the device connected to USB A. | Audio, Search and operations must be normal. |
| | USB B. | The PC must be linked (in USB 2.0 and USB3.x respectively). |
| | Playback data contained in an SD card. | Audio, Search and operations must be normal. |
| | Confirm the connection with CDJ player and the PC by LAN. | This product is recognized definitely by CDJ player, and LINK be established.<br>This product is recognized to a PC definitely, and LINK be established in rekordbox.<br>(Check that it is connected at 1 Gbps in the PC network properties.) |
| 4 | Check output signals while the Jog dial or TEMPO slider is being operated. | Audio and operations must be normal. |
| 5 | Check the keys on the unit. | Check whether a product can be operated properly by buttons on the product. |
| 6 | Check the LCD display. | Check that there is no dirt or dust trapped inside the LCD display. |
| 7 | Check the Touch panel. | Check whether a product can be operated properly in a confirmation screen of the touch panel of the Service mode. |
| 8 | Check the fan motor ventilation oral region. | Take the cover of the bottom; clean with the dirt check of the ventilation oral region. |
| 9 | Check the appearance of the product. | No scratches or dirt on its appearance after receiving it for service. |

See the table below for the items to be checked regarding audio.

| Item to be checked regarding audio | |
|---|---|
| Distortion | Volume too high |
| Noise | Volume fluctuating |
| Volume too low | Sound interrupted |

# 3.2 JIGS LIST

## Jigs List

| Jig Name | Part No. | Purpose of use / Remarks |
|---|---|---|
| USB cable (USB2.0) | GGP1193 | For PC connection |
| USB cable (USB3.x) | Marketed product (USB3.0 certified product) | For PC connection / For USB3.x device check 0.5 to 1.5 m length recommended |
| 4P extension cable | GGP1542 | 4P extension cable for Confirmation of the specified value by Jog dial rotation |
| Disc force eject pin | DEX1024 | For gear of Jog dialvpositionings |
| Software for writing the serial number | GGS1917 | For writing the serial number of the unit to the MAIN Assy |

## Lubricants and Glues List

| Name | Part No. | Remarks |
|---|---|---|
| Lubricating oil (FLOIL PN-397B) | GYA1001 | Used for "9.6 JOG DIAL SECTION". Refer to "7. DISASSEMBLY". |
| Lubricating oil (FLOIL FG-80H) | GEM1104 | Used for "9.3 CONTROL PANEL (1/2) SECTION", "9.6 JOG DIAL SECTION". Refer to "7. DISASSEMBLY". |
| Lubricating oil (Dry Surf HFD1600) | GEM1038 | Used for "9.6 JOG DIAL SECTION". Refer to "7. DISASSEMBLY". |
| Bond (BOND KE40RTV) | GYA1011 | Used for "9.2 CHASSIS SECTION". Refer to "7. DISASSEMBLY". |
| Acetate tape | GYH1035 | Used for "9.2 CHASSIS SECTION". Refer to "7. DISASSEMBLY". |

## Cleaning

Before shipping out the product, be sure to clean the following positions is extremely dirty by using the prescribed cleaning tools.

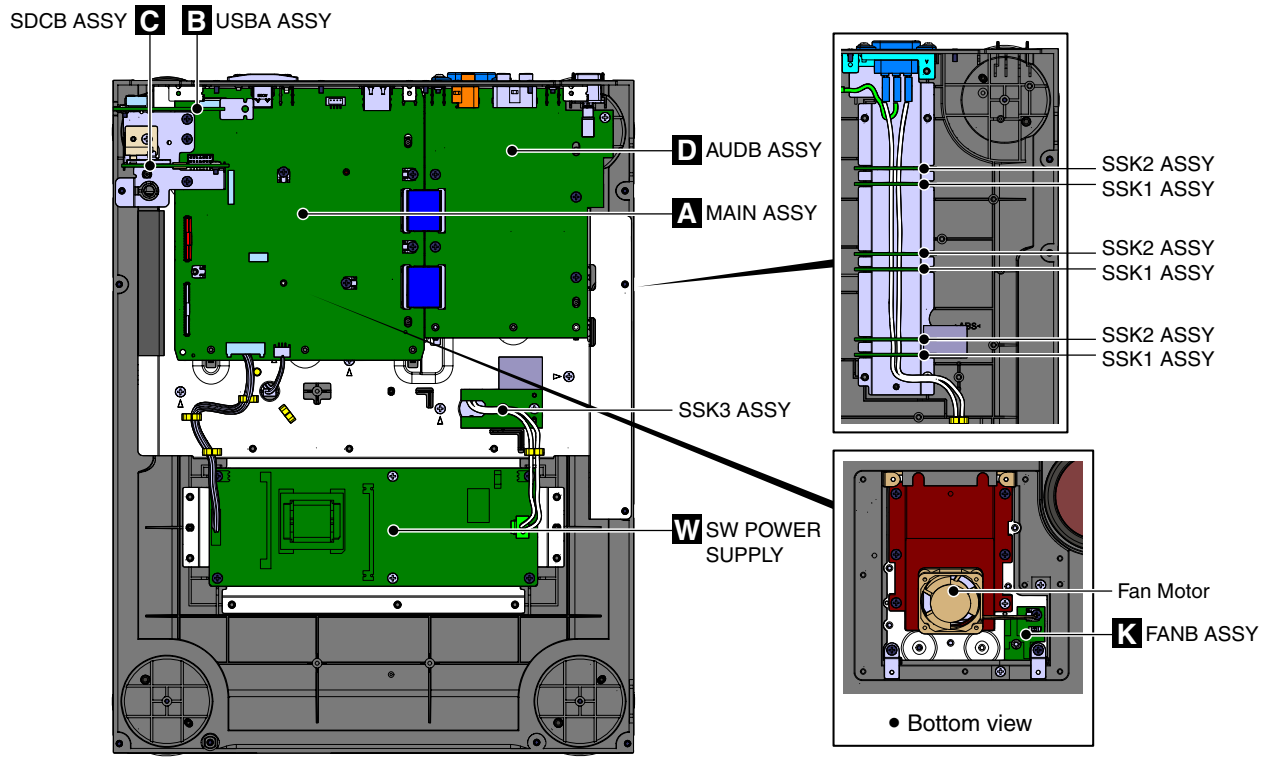
| Position to be cleaned | Name | Part No. | Remarks |
|---|---|---|---|
| Fan | Cleaning liquid | GEM1004 | Used for "9.2 CHASSIS SECTION". Refer to "7. DISASSEMBLY". |
| | Cleaning paper | GED-008 | |

## ■ CDJ-3000 Service check sheet

| | Check contents | Check target | Operation part, Setting | Display part (LED) | Display part (LCD) | Status | Check |
|---|---|---|---|---|---|---|---|
| Service Mode | Each version display | Firmware etc. | ———— | ———— | Main CPU<br>System Version<br>App Revision<br>Kernel Revision<br>Sub CPU<br>Panel Version<br>MAC ADDRESS<br>MAIN<br>USB-LAN<br>DESTINATION<br>SERIAL No. | | ☐ Ver.____<br>☐ Ver.____<br>☐ Ver.____<br>☐ Ver.____<br>_ _ _ _ _<br>_ _ _ _ _<br>_____<br>_____ |
| | LED, LCD check | All light on | [TRACK FILTER], [SHORT CUT] | All LED<br>(Full-color, Monochromatic) | LCD: Color pattern, JOG LCD: White | Press ➡ White ➡ Red ➡ Green ➡ Blue | ☐ |
| | | All light off | [PLAY] | All LED<br>Stand by LED | LCD, JOG LCD | Mode switch ➡ All LED lights off, LCD and JOG LCD are displaed Black screen. Press ➡ light on (during) | ☐ |
| | Elements check | Button | Button (self-lighting) | lights on in initial state, and lights off when button is pressed. | A button name pressing down is displayed by "CURRENT VALUE". | Press ➡ Self-lighting LED lights off, and "RESULT" count up. All buttons are completed normally ➡ [OK] is displayed by "RESULT". | ☐ RESULT [OK] |
| | | Lever | Direction Lever | ———— | A status is displayed by "CURRENT VALUE". | Depending on a status [FWD], [REVERSE], [SLIP REVERSE] is displayed.] All statuses are detected. ➡ [OK] is displayed by "RESULT". | ☐ RESULT [OK] |
| | | SD card switch | SD card switch | ———— | A status is displayed by "CURRENT VALUE". | Either of [OPEN], [CLOSE] is displayed depending on a status. Both statuses are detected. ➡ [OK] is displayed by "RESULT". | ☐ RESULT [OK] |
| | | Analog elements | Encoder | ———— | A present value is displayed by "CURRENT VALUE". | Numerical value is displayed depending on the position of the Encoder. The position of both ends is detected. ➡ [OK] is displayed by "RESULT". | ☐ RESULT [OK] |
| | | | TEMPO slider | ———— | A present value is displayed by "CURRENT VALUE". | Numerical value is displayed depending on the position of the Slider. The position of both ends is detected. ➡ [OK] is displayed by "RESULT". | ☐ RESULT [OK] |
| | | | VINYL SPEED ADJ knob | ———— | A present value is displayed by "CURRENT VALUE". | Numerical value is displayed depending on the position of the Knob. The position of both ends is detected. ➡ [OK] is displayed by "RESULT". | ☐ RESULT [OK] |
| | | Jog dial | JOG TOUCH SW<br>JOG ROTATION | <br>Forward rotation: White<br>Reverse rotation: Red | A status is displayed by "CURRENT VALUE".<br>A status is displayed by "CURRENT VALUE". | "ON" is displayed while you touch Jog dial.<br>The rotation direction of Jog is displayed. | ☐<br>☐<br>☐ |
| | Touch panel check | Touch panel | ———— | ———— | A quadrangle is displayed in the four corners. | When you touch a quadrangle, the quadrangle turn it blue. When all the quadrangles are touched, "OK" is displayed. | ☐ [OK] |
| | Fan operation check | Fan motor | [HOT CUE A]<br>[HOT CUE B]<br>[HOT CUE C] | ———— | A current rotary status is displayed by "STATUS". | Press ➡ Fan rotates slowly.<br>Press ➡ Fan rotates fast.<br>Press ➡ Fan rotation become stop. | ☐<br>☐<br>☐ |
| | Thermometer check | Built-in thermometer | [PLAY] | ———— | The measurements of the thermometer of AREA 0, 1, 2 are displayed. | Press ➡ It measures temperature and judge [OK]/[NG]. | ☐ [OK] ☐ [NG] |
| | Auto standby test | Auto standby | [TEMPO] | ———— | ———— | Press ➡ Auto stanby mode<br>Products usually return it by either operation.<br>(There is exception operation) | ☐<br>☐ |

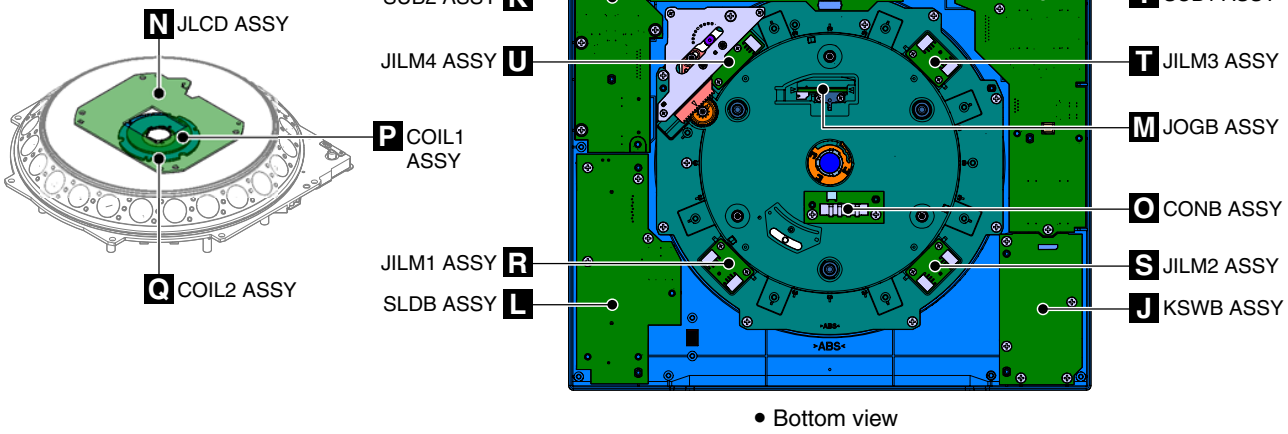
# 3.3 PCB LOCATIONS

## • Chassis Section




## • Control Panel Section

## • JOG Dial Section

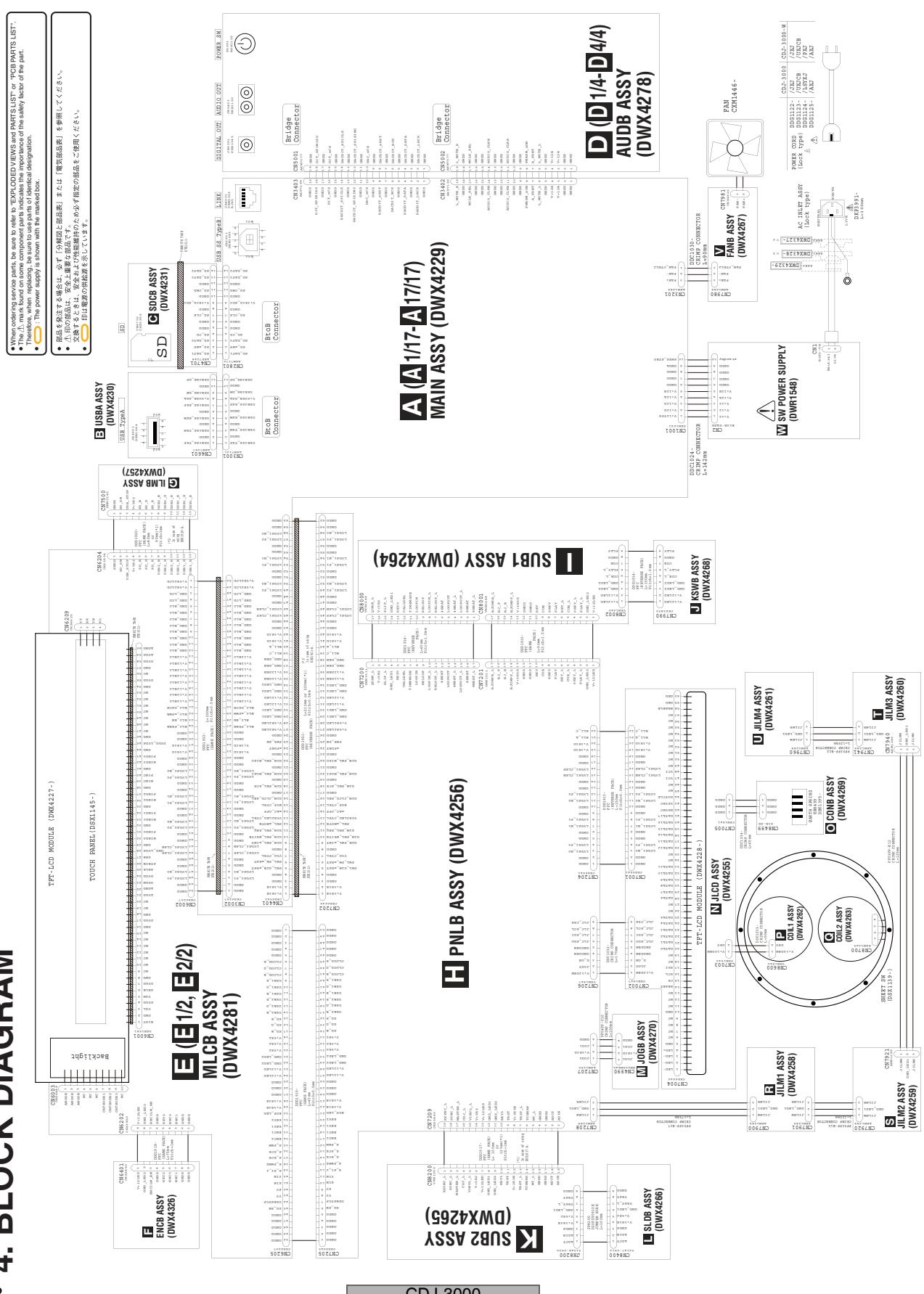


*NOTES:* ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

## LIST OF ASSEMBLIES

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | MAIN ASSY | DWX4229 |
| NSP | 1 | DIFB ASSY | DWM2705 |
| | 2 | USBA ASSY | DWX4230 |
| | 2 | SDCB ASSY | DWX4231 |
| | 1 | AUDB ASSY | DWX4278 |
| NSP | 1 | MLCD ASSY | DWM2728 |
| | 2 | MLCB ASSY | DWX4281 |
| | 2 | ENCB ASSY | DWX4326 |
| NSP | 1 | PNLA ASSY | DWM2710 |
| | 2 | JLCD ASSY | DWX4255 |
| | 2 | PNLB ASSY | DWX4256 |
| | 2 | ILMB ASSY | DWX4257 |
| | 2 | JILM1 ASSY | DWX4258 |
| | 2 | JILM2 ASSY | DWX4259 |
| | 2 | JILM3 ASSY | DWX4260 |
| | 2 | JILM4 ASSY | DWX4261 |
| | 2 | FANB ASSY | DWX4267 |
| | 2 | KSWB ASSY | DWX4268 |
| NSP | 1 | COIL ASSY | DWM2711 |
| | 2 | COIL1 ASSY | DWX4262 |
| | 2 | COIL2 ASSY | DWX4263 |
| | 2 | JOGB ASSY | DWX4270 |
| NSP | 1 | SUBA ASSY | DWM2712 |
| | 2 | SUB1 ASSY | DWX4264 |
| | 2 | SUB2 ASSY | DWX4265 |
| | 2 | SLDB ASSY | DWX4266 |
| | 2 | CONB ASSY | DWX4269 |
| | 2 | SSK1 ASSY | DWX4327 |
| | 2 | SSK2 ASSY | DWX4328 |
| | 2 | SSK3 ASSY | DWX4329 |
| ⚠ | 1 | SW POWER SUPPLY | DWR1548 |

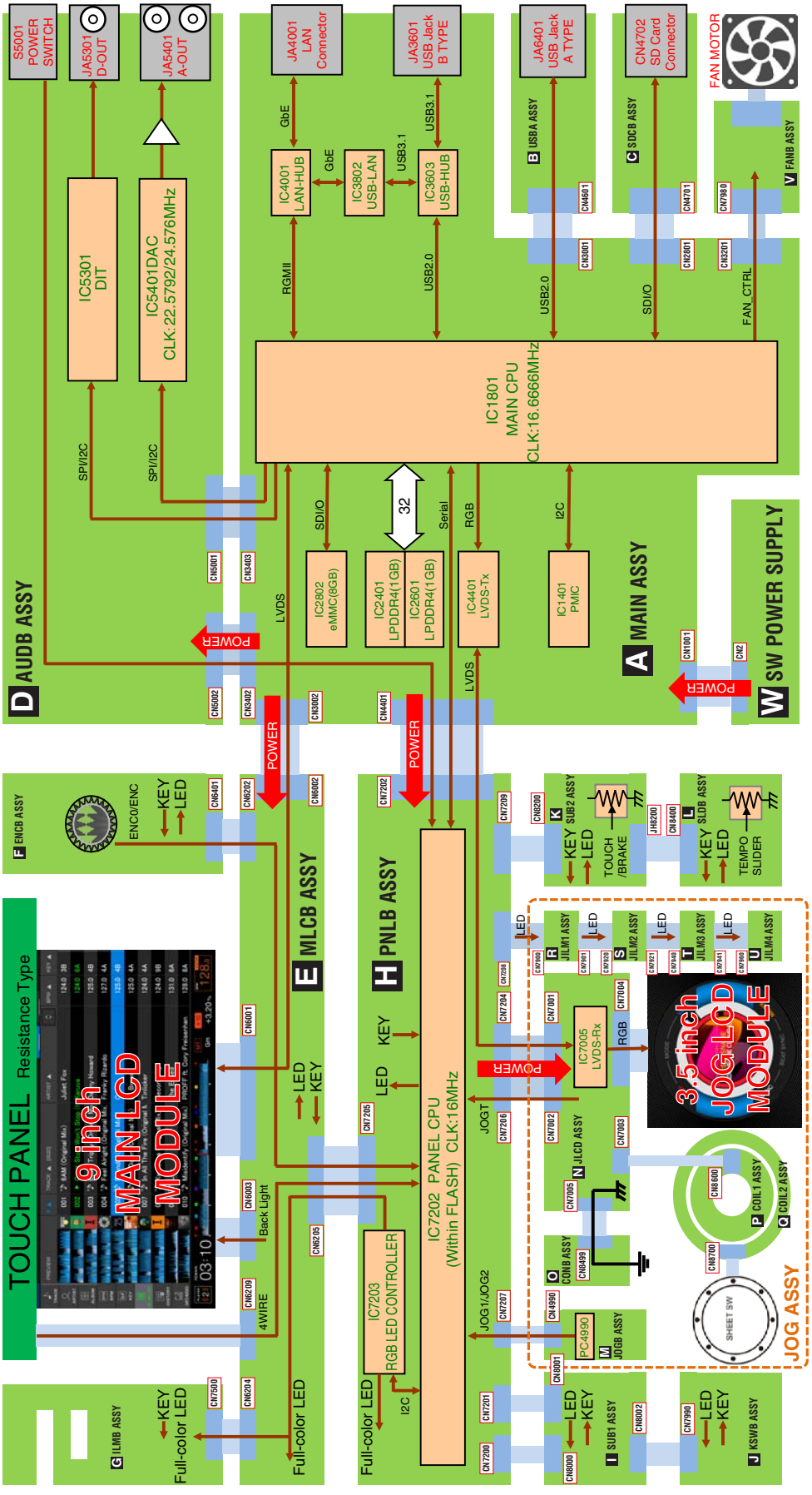
# 4. BLOCK DIAGRAM
## 4.1 OVERALL WIRING DIAGRAM



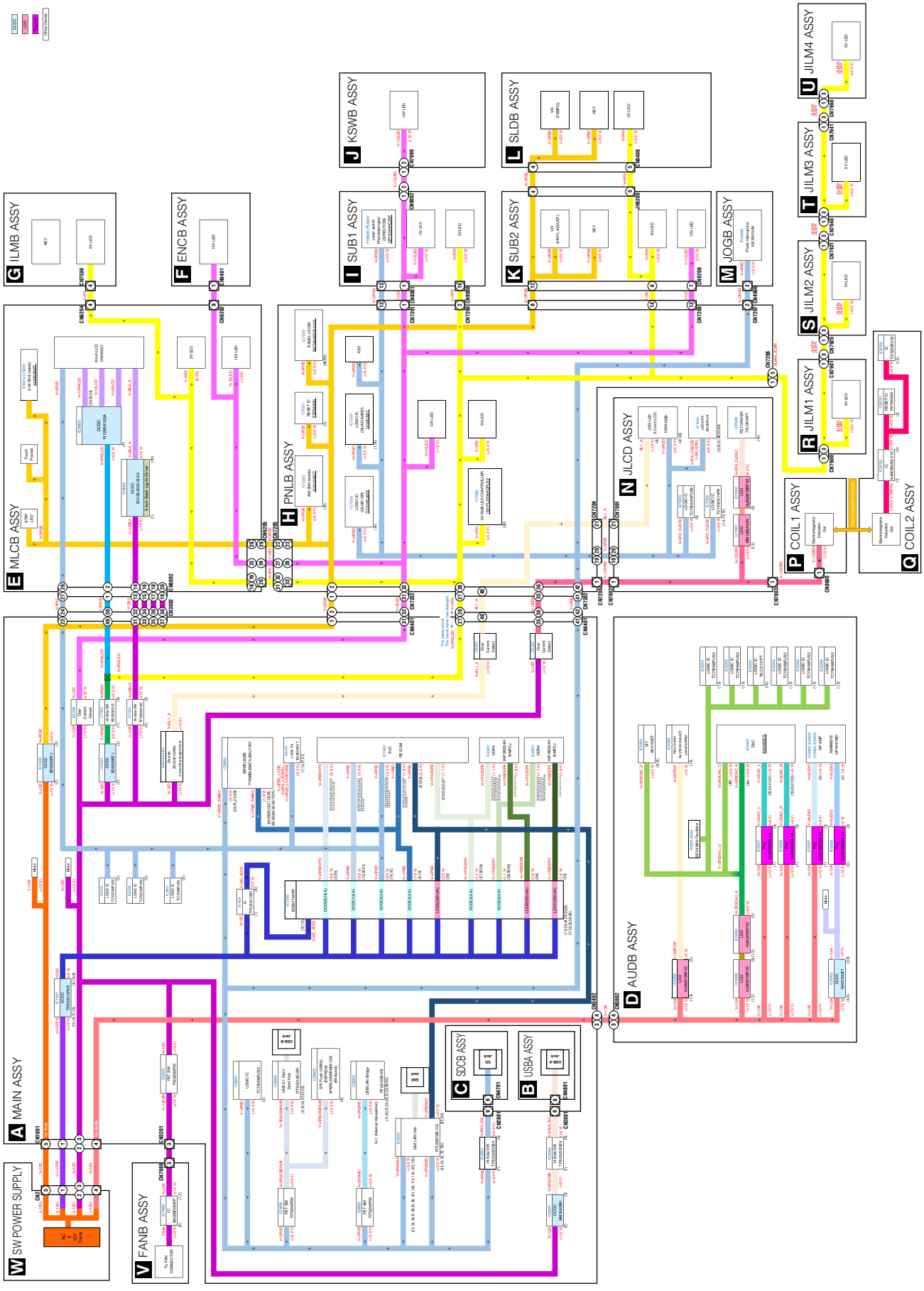

- When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of the identical designation.
- ○: The power supply is shown with the marked box.

- 部品を発注する場合は、必ず「分解図と部品表」または「電気部品表」を参照してください。
- ⚠印の部品は、安全上重要な部品です。
交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。
- ○印は電源の供給表を示しています。

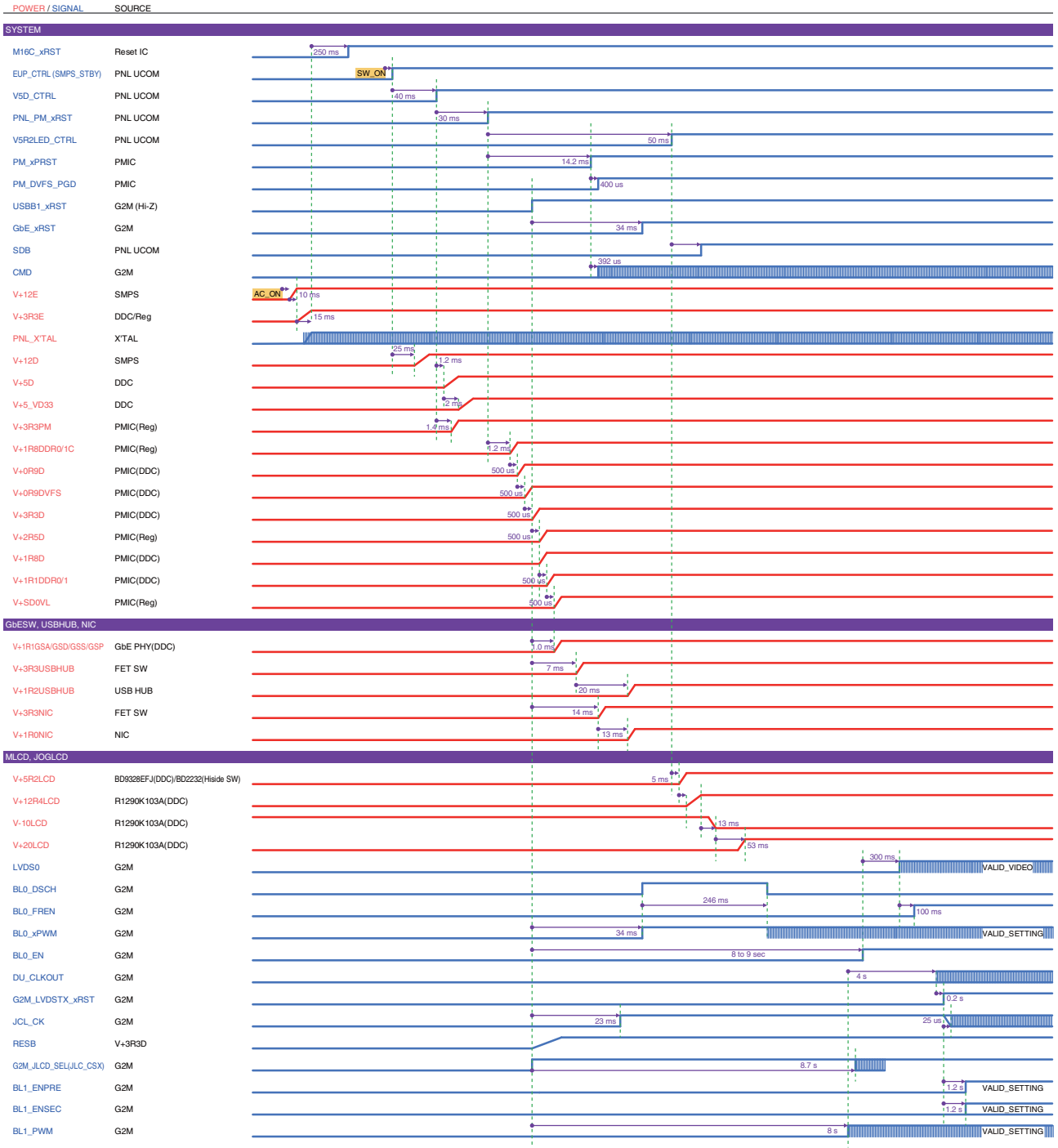
## 4.2 SIGNAL ROUTE BLOCK DIAGRAM



# 4.3 POWER BLOCK DIAGRAM



# 5. DIAGNOSIS
## 5.1 POWER ON SEQUENCE



# 5.2 TROUBLESHOOTING

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[8] Power supply monitoring
- [8-1] Power supply monitoring


## [1] Startup

### [1-1] No startup (Only the SOURCE indicator keeps blinking)

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Power supply malfunction is detected | Each Assy | The power supply malfunction has been detected, and it is in a shutdown state. Confirm the each circuit in "5.4 VOLTAGE MONITORING CIRCUIT"<br>※ This state is kept until IC7202 (PANEL CPU) is reset. | Search for defective power circuits, repair the defective soldering and replace parts if found. If the parts that are difficult to replace are defective, the relevant Assy must be replaced. | 5.4 VOLTAGE MONITORING CIRCUIT |

### [1-2] No startup (All LEDs and LCD light off including the SOURCE indicator)

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | SW POWER SUPPLY has defect | SW POWER SUPPLY | Confirm that pin 5 of CN2 on SW POWER SUPPLY is 12 V while the power cord is plugged in. | If not confirmed, replace SW POWER SUPPLY. | — |
| 2 | Power supply circuit have defect | MAIN Assy | Confirm that there is the signal of V+3R3E (PANEL CPU Power) while the power cord is plugged in. | If not confirmed, confirm the peripheral circuit of IC1003 (DC/DC CONVERTER) and repair the defective soldering if found. If not confirmed, replace MAIN Assy. | — |
| 3 | Power switch have defect | AUDB Assy | Confirm the circuit between S5001 (Power switch) on AUDB Assy and IC7202 (PANEL CPU) on PNLB Assy. | Repair defective soldering and connection if found. If the signal does not change from H to L when Power switch is turned from OFF to ON, replace the switch. | — |
| 4 | PANEL CPU or peripheral circuit have defect | PNLB Assy | Confirm that the signal of pin 35 (EUP_CTRL) of IC7202 (PANEL CPU) on PNLB Assy changes to H when Power switch is turned to ON. | Confirm the peripheral circuit of IC7202 (PANEL CPU), and repair defective soldering if found. If not found, replace IC7202 (PANEL CPU). | — |
| 5 | SW POWER SUPPLY or Power control circuit have defect | SW POWER SUPPLY | Confirm that pin 1 and 2 (V+12TPS, V+12D) of CN2 on SW POWER SUPPLY is 12 V when Power switch is turned to ON. | If pin 10 (STBY) of CN2 is 0 V, replace SW POWER SUPPLY. If it is about 10 to 12 V, confirm the circuit between pin 35 (EUP_CTRL) of IC7202 (PANEL CPU) and pin 10 (EUP_CTRL) of CN2. | — |
| 6 | Power supply circuit for MAIN CPU has defect | MAIN Assy | Refer to "4.3 POWER BLOCK DIAGRAM" to confirm that the voltages of IC1201 (V+5D) and IC1401 (PMIC) are normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | Confirm the peripheral circuit of IC1201 (V+5D) and IC1401 (PMIC), and repair defective soldering if found. If not found, replace MAIN Assy. | 4.3 POWER BLOCK DIAGRAM |
| 7 | The other power supply circuits have defect | Each Assy | Refer to the "4.3 POWER BLOCK DIAGRAM" to confirm that Power supply circuits except the above are normal. | Search for defective power circuits, repair the defective soldering and replace parts if found. | 4.3 POWER BLOCK DIAGRAM |

## [2] LCD display

### [2-1] Main LCD does not turn on or the display is abnormal

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Back light circuit have defect | MLCB Assy | Confirm that pin 1 (BLO_A) of CN6003 is about 30 V. | If not confirmed, confirm the peripheral circuit of IC6004 (LCD BACKLIGHT DRIVER) and repair the defective soldering if found. If not confirmed, replace MLCB Assy. | — |
| 2 | TFT power supply circuit have defect | MLCB Assy | Confirm that the voltage of V+20LCD, V+12R4LCD, and V-10LCD of IC6001 (LCD POWER IC) are normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | If not confirmed, confirm the peripheral circuit of IC6001 (LCD POWER IC) and repair the defective soldering if found. If not confirmed, replace MLCB Assy. | — |
| 3 | Power supply circuit from MAIN Assy have defect | MLCB Assy | Confirm that the voltage of pin 4 (V+3R3LCD) of CN6001 is normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | If not confirmed, confirm V+3R3D circuit from MAIN Assy and repair the defective soldering and replace parts if found. | — |
| 4 | MAIN CPU has defect | MAIN Assy | Confirm that the waveform of LVDS circuits of CN3002 (pin 3, 4, 7, 8, 11, 12, 15, 16, 19 and 20) are normal. | If not confirmed, confirm the peripheral circuit of IC1801 (MAIN CPU) and repair the defective soldering and replace parts if found. If not confirmed, replace MAIN Assy. | 10.45 WAVEFORMS ① |
| 5 | LVDS circuit from MAIN Assy have defect | MLCB Assy | Confirm that the waveform of LVDS circuits of CN6001 (pin 30, 31, 33, 34, 36, 37, 39, 40, 42 and 43) are normal.<br>※ The same waveform as in "10.45 WAVEFORMS ①" is displayed. | If not confirmed, confirm LVDS circuit from MAIN Assy and repair the defective soldering and replace parts if found. | 10.45 WAVEFORMS ① |
| 6 | Main LCD module has defect | Main LCD module | The problem has not improved until the above. | Replace Main LCD module. | — |

### [2-2] Jog LCD does not turn on or the display is abnormal

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Back light circuit have defect | MAIN Assy | Confirm that the voltage of the emitter of Q4407 is normal.<br>※ The normal value is 0.1 V to 1.3 V. | If not confirmed, confirm the peripheral circuit of Q4402, Q4403, Q4404, Q4406, Q4407 and Q4408 and repair the defective soldering and replace parts if found. | — |
| 2 | Power supply circuit from MAIN Assy have defect | JLCD Assy | Confirm that the voltage of pin 47 (V+3R3D) on CN7004 is normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | If not confirmed, confirm V+3R3D circuit from MAIN Assy and repair the defective soldering and replace parts if found. | — |
| 3 | MAIN CPU has defect | MAIN Assy | Confirm that the waveforms of the input circuit (DU_CLKOUT, DU_DR*, DU_DG*, DU_DB*) of IC4401 (LVDS Tx) is normal. | If not confirmed, confirm the peripheral circuit of IC1801 (MAIN CPU) and repair the defective soldering and replace parts if found. If not confirmed, replace MAIN Assy. | 10.45 WAVEFORMS ② |
| 4 | LVDS circuit from MAIN Assy have defect | JLCD Assy | Confirm that the waveforms of the input circuit (JCL_CK, JLC_R*, JLC_G*, JLC_B*) of IC7005 (LVDS Rx) is normal.<br>※ The same waveform as in "10.45 WAVEFORMS ②" is displayed. | If not confirmed, confirm the peripheral circuit of IC1801 (MAIN CPU) and repair the defective soldering and replace parts if found. If not confirmed, replace MAIN Assy. | 10.45 WAVEFORMS ② |
| 5 | Jog LCD module has defect | Jog LCD module | The problem has not improved until the above. | Replace Jog LCD module. | — |

## [3] LED indication

Note: The point where Monochromatic LED, full-color LED are applied to refer to "6. SERVICE MODE_Mode 2/10 LED ALL ON, LCD CHECK".

### [3-1] Monochromatic LED does not turn on

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Defective soldering | Each Assy | Confirm the soldering status of each LED. | Repair the defective soldering if found. | — |
| 2 | Defective LED | Each Assy | Confirm that the forward voltage of the LED is about 2 V to 3 V. | If not confirmed, replace LED. | — |
| 3 | Lighting circuit have defect | Each Assy | Confirm that the control signals that output from IC7202 (PANEL CPU) or IC7200/ IC6002/IC6003 (Shift register) are normal. | If the signal is normal and the LED does not light on, replace the drive transistor. | — |
| 4 | PANEL CPU has defect | PNLB Assy | Confirm that the control signals output normal. | If not confirmed, replace IC7202 (PANEL CPU) or IC7200/IC6002/IC6003 (Shift register). | — |

### [3-2] Full-color LED does not turn on

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Defective soldering | Each Assy | Confirm the soldering status of each LED. And, confirm the peripheral circuit of IC7203 (RGB LED CONTROLLER). | Repair the defective soldering if found. | — |
| 2 | LED has defect | Each Assy | Confirm that the forward voltage of the LED is about 2 V to 3 V. | If not confirmed, replace LED. | — |
| 3 | PANEL CPU has defect | PNLB Assy | Confirm that the control signal (SDA, SCL) that output from IC7202 (PANEL CPU) to IC7203 (RGB LED CONTROLLER) is normal. | If not confirmed, replace IC7202 (PANEL CPU). | 10.45 WAVEFORMS Ⓐ |
| 4 | LED Driver IC has defect | PNLB Assy | Confirm that the control signal that output from IC7203 (RGB LED CONTROLLER) to each LED is normal. | If not confirmed, replace PNLB Assy. | — |

## [4] Operation

### [4-1] The rotary encoder is not working

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Rotary Encoder circuit have defect | ENCB Assy | Confirm the circuit of ENC0, ENC1 and KEY2. | Repair the defective soldering and the defective connection if found. | — |
| 2 | Rotary Encoder has defect | ENCB Assy | Operate S6405 (Rotary Encoder) and confirm that the following changes occur.<br>1. Turning it reverses the polarity of ENC0 and ENC1<br>2. Pushing it changes the signal level of KEY2 | If not confirmed, replace S6405 (Rotary Encoder). | 10.45 WAVEFORMS Ⓑ |
| 3 | PANEL CPU has defect | PNLB Assy | The problem has not improved until the above. | If not confirmed, replace IC7202 (PANEL CPU). | — |

### [4-2] The button is not working

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Button has defect | Each button | Confirm that the appropriate button presses the appropriate switch. | If the switch is not pressed, replace the button. | — |
| 2 | SW POWER SUPPLY has defect | SW POWER SUPPLY | Confirm that pin 5 (ever power output) of CN2 on SW POWER SUPPLY is 12 V while the power cord is plugged in. | If not confirmed, replace SW POWER SUPPLY. | — |
| 3 | Power supply circuit have defect | MAIN Assy | Confirm that the voltage of V+3R3E (PANEL CPU Power) is normal while the power cord is plugged in. | If not confirmed, confirm the peripheral circuit of IC1003 (DC/DC CONVERTER) and repair the defective soldering if found. If not confirmed, replace MAIN Assy. | — |
| 4 | Reset circuit have defect | PNLB Assy | Confirm that pin 1 of IC7201 (Reset IC) on PNLB Assy is H while the power cord is plugged in. | If not confirmed, confirm the peripheral circuit of IC7201 and repair the defective soldering if found. If not confirmed, replace IC7201. | — |
| 5 | CLK signal of PANEL CPU have defect | PNLB Assy | Confirm that CLK signal of PANEL CPU is normal.<br>(Pin 13 of IC8001 = 16 MHz) | If not confirmed, confirm X7200 or the associated circuits and repair the defective soldering if found. If not confirmed, replace X7200. | 10.45 WAVEFORMS Ⓒ |
| 6 | Switch circuit have defect | Each Assy | Confirm the circuit from each switch to IC7202 (PANEL CPU). | Repair defective solder, defective connections, and the peeled patterns if found. | — |
| 7 | Switch has defect | Each Assy | Confirm that the signal goes from H to L when the switch is pressed. | If not confirmed, replace each switch. | — |
| 8 | PANEL CPU has defect | PNLB Assy | The problem has not improved until the above. | Replace IC7202 (PANEL CPU). | — |

### [4-3] TEMPO slider is not working

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Poor adjustment | SLDB Assy | Confirm that ADCT value is normal (about 1.65 V). | If not normal, refer to "8.5 TEMPO ZERO POINT ADJUSTMENT" to adjust TEMPO slider. | 8.5 TEMPO ZERO POINT ADJUSTMENT |
| 2 | TEMPO slider circuit have defect | SLDB Assy | Confirm ADIN circuit from VR8400 (TEMPO slider) to IC7202 (PANEL CPU). | Repair defective solder, defective connections, and the peeled patterns if found. | — |
| 3 | TEMPO slider has defect | SLDB Assy | Operate TEMPO slider and confirm that the voltage of the ADIN signal change from 0 V to 3.3 V. | If not confirmed, replace VR8400 (TEMPO slider). | — |
| 4 | PANEL CPU has defect | PNLB Assy | The problem has not improved until the above. | Replace IC7202 (PANEL CPU). | — |

### [4-4] TOUCH/BRAKE volume is not working

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Volume circuit have defect | SUB2 Assy | Confirm TCHBRK circuit from VR8200 (TOUCH/BRAKE) to IC7202 (PANEL CPU). | Repair defective solder, defective connections, and the peeled patterns if found. | — |
| 2 | Volume has defect | SUB2 Assy | Operate Volume and confirm that the voltage of the TCHBRK signal change from 0 V to 3.3 V. | If not confirmed, replace VR8200 (TOUCH/BRAKE). | — |
| 3 | PANEL CPU has defect | PNLB Assy | The problem has not improved until the above. | Replace IC7202 (PANEL CPU). | — |

### [4-5] The touch panel is not working

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Poor calibration | — | Confirm that you cannot touch the desired point due to misalignment. | If it is out of alignment, perform the calibration again. | — |
| 2 | It has defective connectors and so on | MLCB Assy | Confirm the circuit between CN6209 (Touch panel connector) and CN6205 (connect to PANEL CPU). | Repair defective solder and defective connections if found. | — |
| 3 | The touch panel circuit have defect | PNLB Assy | Confirm XIN and YIN circuits from CN7205 (Touch panel signal connector) to IC7202 (PANEL CPU). | Repair defective solder and defective connections if found. | — |
| 4 | The touch panel have defect | PNLB Assy | Confirm that the voltage of XIN and of YIN change from 0 V to 3.3 V when you touch the touch screen. | If not confirmed, replace the touch panel. | 10.45 WAVEFORMS ③ |
| 5 | PANEL CPU has defect | PNLB Assy | The problem has not improved until the above. | Replace IC7202 (PANEL CPU). | — |

### [4-6] The Jog rotation is not detected

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Encoder plate has defect | — | Confirm that Encoder plate is properly installed and that Encoder plate is not dirty or damaged. | Install the Encoder plate correctly.<br>Replace the plate if it is dirty or damaged. | — |
| 2 | Photo-interrupter has defect | Photo-interrupter | Confirm that Photo-interrupter is properly installed into the Encoder plate. | Install the Photo-interrupter correctly. | — |
| 3 | Photo-interrupter circuit have defect | JOGB Assy | Confirm JOG1 and JOG2 circuits from PC4990 (Photo-interrupter) to IC7202 (PANEL CPU). | Repair defective solder and defective connections if found. | — |
| 4 | Photo-interrupter has defect | JOGB Assy | Confirm that JOG1 and JOG2 signals continue to flip L or H at 90 degrees different phases when the jog is rotated. | If not confirmed, replace PC4990 (Photo-interrupter). | 10.45 WAVEFORMS Ⓓ |
| 5 | PANEL CPU has defect | PNLB Assy | The problem has not improved until the above. | Replace IC7202 (PANEL CPU). | — |

## [4-7] The Jog touch is not detected

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Power supply circuit have defect | MAIN Assy | Confirm that V+12DEN is output. | If not confirmed, search for defective power circuits, repair the defective soldering and replace parts if found. | — |
| 2 | JOGT circuit have defect | PNLB Assy | Confirm that the signal is input to pin 2 (JOGT) of CN7206 when the jog is touched. | If confirmed, confirm that the signal reaches the panel microcomputer. If not confirmed, confirm the signal circuit. If the signal is reaching the pins of PANEL CPU but the touch operation cannot be detected, replace PANEL CPU.<br>If not confirmed, disassemble Jog Assy and move on to the internal checking. | — |
| 3 | The sensor has defect | Sensor (Sheet switch) | Confirm that Sensor is properly installed and that Sensor is not dirty, damaged or contaminated with water. | Install Sensor correctly. Replace Sensor if it has dirt, damage, or moisture in it. | — |
| 4 | COIL2 has defect | COIL2 Assy | Confirm the circuit from Sensor to COIL2 Assy, and confirm that there is no defective soldering on the parts of COIL2 Assy. | Repair defective solder and defective connections if found. | — |
| 5 | COIL drive circuit have defect | JLCD Assy | Confirm the peripheral circuits of COIL1 Assy and JLCD Assy. | - Repair the connection between COIL1 Assy and JLCD Assy if there are connection defects.<br>- Repair the defective soldering on JLCD Assy, if found.<br>- If pin 5 of IC7002 (LDO) is not 3.3 V, replace IC7002.<br>- If pin 4 of IC7003 (LOGIC) is not 8 MHz, replace X7001 (Resonator) or IC7003.<br>- If pin 8 of IC7004 (LOGIC) is not 2 MHz, replace IC7004.<br>- If the gate of Q7003 (FET) is not 2 MHz, replace IC7006 (LOGIC).<br>- If pin 2 of CN7003 is not Half-wave waveform of 2 MHz, replace Q7003 (FET). | 10.45 WAVEFORMS ④ |
| 6 | JLCD has defect | JLCD Assy | Confirm that the voltage of pin 2 (JOG_SW) of CN7002 change the following state.<br>1. It changes to about 0.5 V when you stop touching Jog<br>2. It changes to about 1.5 V when you touch Jog | If not confirmed, replace the parts in the order of JLCD Assy, COIL2 Assy and COIL1 Assy. | — |

## [4-8] Turning the jog makes a strange noise

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Jog brake has defect | JOG section | Confirm that the brake (DED1189) is not peeling. | Wipe Jog dial (DNK6777) clean with ethanol. Replace Brake. | — |
| 2 | Jog roller has defect | JOG section | Confirm that there are no foreign materials on Roller (DXB2178) or that Roller (DXB2178) is not deformed. | Remove foreign materials or replace Roller. | — |

## [4-9] Turning the jog is light

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Jog adjustment or Jog assembly is incorrect | JOG section | Refer to "8.4 JOG DIAL ROTATION LOAD ADJUSTMENT" to confirm that the jog load value is within the specification. | - If it is out of specification, refer to "8.4 JOG DIAL ROTATION LOAD ADJUSTMENT" for calibration. Wipe and reassemble Jog dial (DNK6777) as necessary.<br>- Apply grease to the shaft if it is low in grease. | 8.4 JOG DIAL ROTATION LOAD ADJUSTMENT |

## [4-10] Turning the jog is heavy

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Poor Jog adjustment | JOG section | Refer to "8.4 JOG DIAL ROTATION LOAD ADJUSTMENT" to confirm that the jog load value is within the specification. | If it is out of specification, refer to "8.4 JOG DIAL ROTATION LOAD ADJUSTMENT" for calibration. Wipe and reassemble Jog dial (DNK6777) as necessary. | 8.4 JOG DIAL ROTATION LOAD ADJUSTMENT |

### [4-11] The switching of the Jog touch from ON to OFF is slow

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Jog outer assembly is incorrect | JOG section | Confirm that Damper (DEB2083) is properly assembled. | Reassemble Damper to the correct position. | — |
| 2 | Jog outer assembly have defect | JOG section | Confirm whether Jog dial (DNK6778) and Damper (DEB2083) do not touch it. | Replace the Jog dial (DNK6778). | — |

## [5] Sound output

### [5-1] There is no sound from the analog output jack

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Mute circuit have defect | AUDB Assy | Confirm that the voltage of the pin 6, 19 (L_MUTE_L, L_MUTE_R) of CN5002 is normal when the sound is playing.<br>※ The voltage is -12 V during playing sound, +11 V during muting. | If not normal, confirm Q1351, Q1352, Q1353, Q1354, Q1355, Q1356, Q1357, Q1359 and the peripheral circuit of these parts, and repair the defective soldering and replace parts if found. | — |
| 2 | Audio power supply circuit have defect | AUDB Assy | Confirm that the voltage of V+AUDIO and V-AUDIO are normal.<br>※ V+AUDIO is designed at 9 V and V-AUDIO is designed at -9 V. | If not confirmed, confirm IC5001, IC5002, IC5003 and the peripheral circuit of these parts, and repair the defective soldering and replace parts if found. | — |
| 3 | DAC power supply circuit have defect | AUDB Assy | Confirm that the voltage of each power supply in IC5401 (DAC) is normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | If not confirmed, confirm the associated power supply ICs and their peripheral circuit, and repair the defective soldering and replace parts if found. | — |
| 4 | Reset circuit have defect | AUDB Assy | Confirm that pin 2 (DACDIT_xRST) of IC5401 (DAC) is H. | If not confirmed, confirm DACDIT_xRST circuit from MAIN Assy and repair the defective soldering and replace parts if found. | — |
| 5 | Master CLK has defect | AUDB Assy | Confirm that the waveform of pin 46 (MCLK_DAC) of IC5401 (DAC) is normal.<br>※ The waveform is a square wave of 3.3 V amplitude at 22.5792 MHz or 24.576 MHz. | If not confirmed, confirm the associated peripheral circuit, and repair the defective soldering and replace parts if found. | — |
| 6 | I2S circuit from MAIN Assy have defect | AUDB Assy | Confirm that the waveform of pin 3, 4, 5 (DAC_BCK, DAC_DATA, DAC_LRCK) of IC5401 (DAC) is normal. | If not confirmed, confirm I2S circuit from MAIN Assy and repair the defective soldering and replace parts if found. | 10.45 WAVEFORMS ⑤ |
| 7 | DAC has defect | AUDB Assy | The problem has not improved until the above. | Replace IC5401 (DAC). | — |

### [5-2] There is no sound from the digital output jack

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | DIT power supply circuit have defect | AUDB Assy | Confirm that the voltage of V+3R3DAC_D and V+5SPDIF is normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | If not confirmed, confirm the associated power supply ICs and their peripheral circuit, and repair the defective soldering and replace parts if found. | — |
| 2 | Reset circuit have defect | AUDB Assy | Confirm that pin 5 (DACDIT_xRST) of IC5301 (DIT) is H. | If not confirmed, confirm DACDIT_xRST circuit from MAIN Assy and repair the defective soldering and replace parts if found. | — |
| 3 | Master CLK has defect | AUDB Assy | Confirm that the waveform of pin 1 (MCLK_DIT) of IC5301 (DIT) is normal.<br>※ The waveform is a square wave of 3.3 V amplitude at 22.5792 MHz or 24.576 MHz. | If not confirmed, confirm the associated peripheral circuit, and repair the defective soldering and replace parts if found. | — |
| 4 | I2S circuit from MAIN Assy have defect | AUDB Assy | Confirm that the waveform of pin 2, 3, 4 of (DAC_BCK, DAC_DATA, DAC_LRCK) IC5301 (DIT) is normal.<br>※ The same waveform as in "10.45 WAVEFORMS ⑤" is displayed. | If not confirmed, confirm I2S circuit from MAIN Assy and repair the defective soldering and replace parts if found. | 10.45 WAVEFORMS ⑤ |
| 5 | DIT has defect | AUDB Assy | The problem has not improved until the above. | Replace IC5301 (DIT). | — |

## [6] Interface

### [6-1] It does not recognize the USB flash drive (USB-A)

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Format version | — | Confirm that it is correctly formatted. | If not confirm, use a properly formatted (e.g. FAT32) version. | — |
| 2 | USB bus power supply have defect | USBA Assy | Confirm that the voltage of V+5USB_SSA2 is normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | If not confirmed, confirm IC3001, IC3002 and the peripheral circuit of these parts and repair the defective soldering and replace parts if found. | — |
| 3 | USB circuit from MAIN Assy have defect | Each Assy | Confirm the circuit from IC1801 (MAIN CPU) to JA4601 (USBA jack). | Repair defective solder and defective connections if found. | — |
| 4 | MAIN CPU has defect | MAIN Assy | The problem has not improved until the above. | If not confirmed, confirm the peripheral circuit of IC1801 (MAIN CPU) and repair the defective soldering if found. If not confirmed, replace MAIN Assy. | — |

### [6-2] It does not recognize the SD card

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Format version | — | Confirm that it is correctly formatted. | If not confirm, use a properly formatted (e.g. FAT32) version. | — |
| 2 | The detection signal circuit to MAIN Assy have defect | MAIN Assy | Confirm that the voltage on pin 2 and 4 (SD_xWP, SD_CD) of CN2801 change according to the state of the SD card.<br>※ When an SD card is inserted with a write unlocked state, both pins are L. When an SD card is inserted with the write lock state, RekordboxDB will not be loaded. So, an error is displayed on Main LCD. | Repair defective solder and defective connections if found. | — |
| 3 | Card bus power supply have defect | SDCB Assy | Confirm that the voltage of V+3R3D_SD0 is normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | If not confirmed, confirm IC2801 and the peripheral circuit of this parts and repair the defective soldering and replace parts if found. | — |
| 4 | SD signal circuit from MAIN Assy have defect | Each Assy | Confirm the circuit from IC1801 (MAIN CPU) to CN4702 (SD card slot). | Repair defective solder and defective connections if found. | — |
| 5 | MAIN CPU has defect | MAIN Assy | The problem has not improved until the above. | If not confirmed, confirm the peripheral circuit of IC1801 (MAIN CPU) and repair the defective soldering if found. If not confirmed, replace MAIN Assy. | — |

### [6-3] It does not be recognized the PC (USB-B), or it does not be recognized from the PC

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | VBUS circuit from PC have defect | MAIN Assy | Confirm that pin 4 of IC3601 (LOGIC) is H while PC is connected. | If not confirmed, confirm VBUS circuit from JA3601 (USBB jack) and repair the defective soldering and replace parts if found. | — |
| 2 | USB HUB power supply have defect | MAIN Assy | Confirm that the voltage of V+3R3USBHUB is normal.<br>※ The voltage is designed approximately as the circuit name. (e.g. V+3R3*→3.3 V) | If not confirmed, confirm IC3604 and the peripheral circuit of this parts and repair the defective soldering and replace parts if found. | — |
| 3 | USB signal circuit from MAIN CPU have defect | MAIN Assy | Confirm the below circuits.<br>1. From IC1801 (MAIN CPU) to IC3602 (USB-B HUB)<br>2. From IC3602 (USB-B HUB) to JA3601 (USBB jack) | Repair defective solder and defective connections if found. | — |
| 4 | MAIN CPU or USBHUB have defect | MAIN Assy | The problem has not improved until the above. | If not confirmed, confirm the peripheral circuit of IC1801 (MAIN CPU) and IC3602 (USB-B HUB), and repair the defective soldering if found.<br>If not confirmed, replace MAIN Assy. | — |

### [6-4] It does not be recognized from the PC (LAN)

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | LAN circuit to MAIN CPU have defect | MAIN Assy | Confirm the below circuits.<br>1. From IC1801 (MAIN CPU) to IC4001 (LAN-HUB)<br>2. From IC4001 (LAN-HUB) to JA4001(LAN jack) | Repair defective solder and defective connections if found. | — |
| 2 | MAIN CPU or LAN-HUB have defect | MAIN Assy | The problem has not improved until the above. | If not confirmed, confirm IC1801 (MAIN CPU), IC4001 (LAN-HUB) and the peripheral circuit of these parts and repair the defective soldering if found. If not confirmed, replace MAIN Assy. | — |

## [7] EUP

### [7-1] It cannot switch to the EUP mode

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | AUTO STANDBY is OFF | — | Confirm that AUTO STANDBY in UTILITY setting is ON. | If the setting is turned OFF, the system will not switch to EUP mode. Change the setting as necessary. | — |
| 2 | PANEL CPU has defect | PNLB Assy | Confirm that pin 35 of IC7202 (PANEL CPU) is L. | If not confirmed, replace IC7202 (PANEL CPU). | — |
| 3 | It has defective connectors and so on | Connector connection | Confirm that pin 10 of CN2 on SW POWER SUPPLY is H. | If not confirmed, repair any poorly connected connectors among SW POWER SUPPLY, MAIN Assy and PNLB Assy if found. | — |
| 4 | SW POWER SUPPLY has defect | SW POWER SUPPLY | The problem has not improved until the above. | Replace SW POWER SUPPLY. | — |

### [7-2] It does not return from the EUP mode

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Button and Switch have defect | PNLB Assy and the peripheral Assy | Confirm that the buttons are working. | If not confirmed, confirm the status of that button or switch. If no problem, replace the switch. | — |
| 2 | PANEL CPU has defect | PNLB Assy | Confirm that pin 35 of IC7202 (PANEL CPU) change H according to the signal input of the switch. | If not confirmed, replace IC7202 (PANEL CPU). | — |
| 3 | It has defective connectors and so on | Connector connection | Confirm that pin 10 of CN2 on SW POWER SUPPLY is H. | If not confirmed, repair any poorly connected connectors among SW POWER SUPPLY, MAIN Assy and PNLB Assy if found. | — |
| 4 | SW POWER SUPPLY has defect | SW POWER SUPPLY | The problem has not improved until the above. | Replace SW POWER SUPPLY. | — |

## [8] Power supply monitoring

### [8-1] Power supply monitoring

| No. | Cause | Diagnostics Point | Item to be Confirmed | Corrective Action | Reference |
|---|---|---|---|---|---|
| 1 | Each power supply circuit has defect | Each Assy | SOURCE indicator (Upper of TAG LIST, PLAY LIST buttons) keeps blinking as the power monitoring circuit detects a malfunction. Refer to "5.4 VOLTAGE MONITORING CIRCUIT" to confirm each circuit.<br>※ This state is kept until IC7202 (PANEL CPU) is reset. | Search for defective power circuits, repair the defective soldering and replace parts if found. If the parts that are difficult to replace are defective, the relevant Assy must be replaced. | 5.4 VOLTAGE MONITORING CIRCUIT |

# 5.3 JLCD ASSY DIAGNOSIS METHOD

## ■ Problem about the JOG

The JLCD Assy is structured in such a way that it cannot be diagnosed when the product is in operation.
Because the JLCD Assy is located inside the Jog Assy, as the below figure.

Front side

Back side

The disassembly procedure to the diagnostic status is listed under the following conditions.

Case 1 : The procedure for repairing that the JOG LCD does not work
Case 2 : The procedure for repairing that the product cannot detect the Jog touch

※ The Jog Assy does not need the disassemble when the product cannot detect the Jog rotation.

## Case 1 : The procedure for repairing that the JOG LCD does not work

In order to perform a diagnosis in this case, you need to disassemble the Jog to the following states.

Overall

Diagnostic state

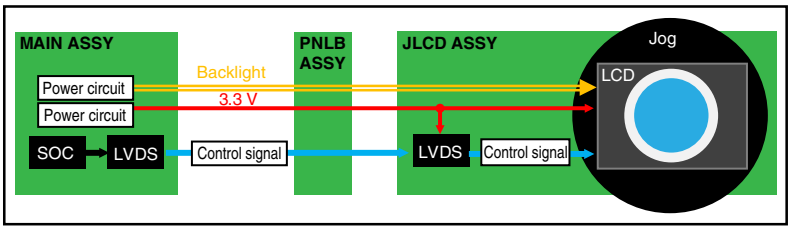
## ■ Diagnostic procedure and contents

- Remove the Control panel Section.
  (Refer to "7. DISASSEMBLY".)

① Before disassembling the Jog Assy, confirm that the MAIN Assy is not defective.
※ MAIN Assy defects can be diagnosed without having to disassemble the Jog Assy.

- Is the back light power (BL1_C) normal?
- Is the control power (V+3R3D) normal?
- Is the control signal from MAIN CPU (IC1801) to LVDS Tx (IC4401) normal?
- Is the output signal from LVDS Tx (IC4401) normal?

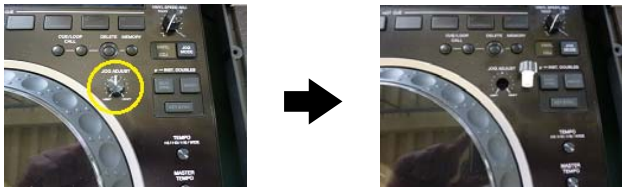
These signals are supplied via PNLB Assy, so you should also confirm the output from PNLB Assy first.



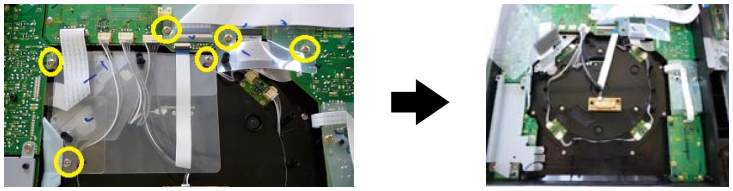

If you don't find any problems after confirming so far, disassemble the Jog Assy.

② Remove the Jog Assy from the Control panel Section.

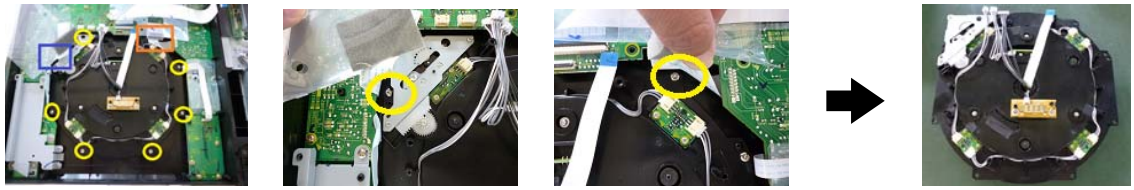
②-1 Remove the Knob.



②-2 Remove the 6 screws and then disconnevct the each FFCs and connectors.

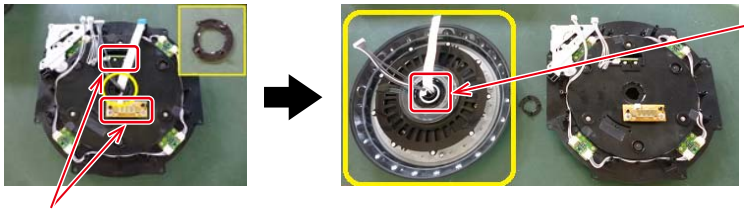


②-3 Remove the 8 screws and then remove the Jog Assy.



③ Remove the JOG LCD Assy from the Jog Assy.

③-1 Remove the Holder (DNK6780) and separate the top and bottom.

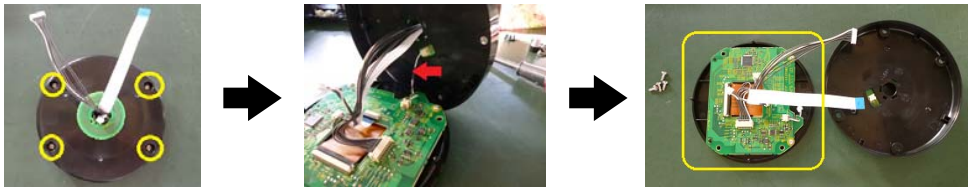


＊ If the white shaft (DNK6785) is attached to DIAL Assy, remove it with tweezers and attach it to HOLDER Assy.
(The shaft may fall off when you check OUTER later)

＊ Removing JOGB and CONB Assys earlier.

③-2 Remove the four screws, and separate the touch part.

③-3 Remove the four screws, disconnect the 2 pin connectors between the JLCD Assy and the COIL1 Assy, and remove the JOG LCD Assy.



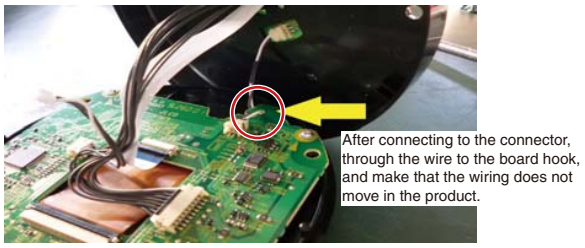
④ Connect JLCD Assy and PNLB Assy with the wires (FFC 22 pin, ZH connector 9 pin Assy), and turn on the power.

⑤ Diagnose it.

- Are the back light power and the control power in the JLCD Assy normal?
  ⇨ Confirm the defective soldering in FFC, Connector and the JLCD Assy. If there are problems, repair them.
- Is the output signal from LVDS Rx (IC7005) normal?
  ⇨ Confirm for signals such as JCL_CK, JLC_R*, JLC_G* and JLC_B*.
  If there is no signal output or the signal waveform is abnormal, replace IC7005.
- If you don't find any problems after confirming so far, replace the Assy in the order of JLCD Assy and JOG LCD Assy.

### [Important] Caution after the repairing

① When disassembling and reassembling the JLCD Assy and the COIL1 Assy, care should be taken with the setting of the wire.

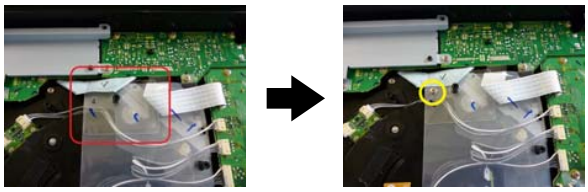

After connecting to the connector,
through the wire to the board hook,
and make that the wiring does not
move in the product.

② When you reassemble the Sheet or replace the SLDB Assy, care should be taken with the setting of the Flat cable jumpers located between the SUB2 Assy and SLDB Assy.
⇨ Stack them in the order of the Sheet (DEC3842), the Flat cable jumper, and the Barrier (DEC3932) and screw them together.

②-1 When installing the Sheet (DEC3842), keep the Flat cable jumper upright.

②-2 Tilt the Flat cable jumper so that it is stacked on top of the Sheet (DEC3842).

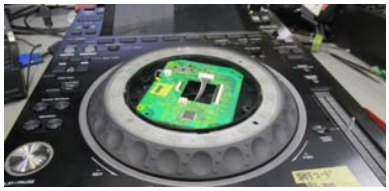
②-3 Stack a Barrier (DEC3932) on the Flat cable jumper and screw them together.



③ After disassembling the JLCD Assy and the COIL2 Assy, be sure to do the calibration of JOG LCD.
(Refet to "6.2 JOG LCD CALIBRATION".)

## Case 2 : The procedure for repairing that the product cannot detect the Jog touch

In order to perform a diagnosis in this case, you need to disassemble the Jog to the following states.



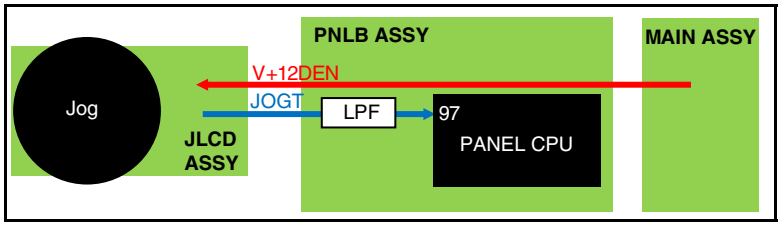
### ■ Diagnostic procedure and contents

- Remove the Control panel Section.
(Refer to "7. DISASSEMBLY".)

---

① Before disassembling the Jog Assy, confirm that the PNLB Assy side is not defective.
※ PNLB Assy defects can be diagnosed without having to disassemble the Jog Assy.

- Is the power for touch detection, or V+12DEN supplied?
  ⇨ Confirm the 1 pin (12V) of CN1212 on the PLNB Assy.
- Is the touch detection signal (JOGT) output when you touch the Jog?
  ⇨ Confirm if there is a change of voltage from 0.5 V to 2 V at the 2 pin of CN7206 on the PLNB Assy.
- Is the JOGT signal input to pin 97 of the PANEL CPU (IC7002)?
  ⇨ Confirm the CPU directly with a tester or oscilloscope.
- The Jog touch cannot be detected even though the JOGT signal is input to the pins of the PANEL CPU.
  ⇨ Replace the PANEL CPU (IC7002).




If you don't find any problems after confirming so far, disassemble the Jog Assy.

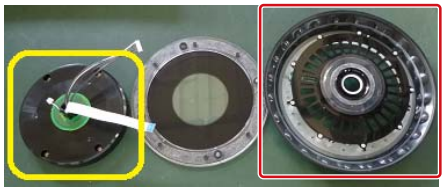
② Remove Jog Assy from the Control panel Section. (Refer to Case 1)

③ Disassemble the Jog Assy, and show the diagnostic side of the JLCD Assy.
③-1 Remove the center Holder (DNK6780) and separate the top and bottom. (Refer to Case 1)
③-2 Remove the three screws, and separate the touch part. (Refer to Case 1)

**- Diagnosis -**

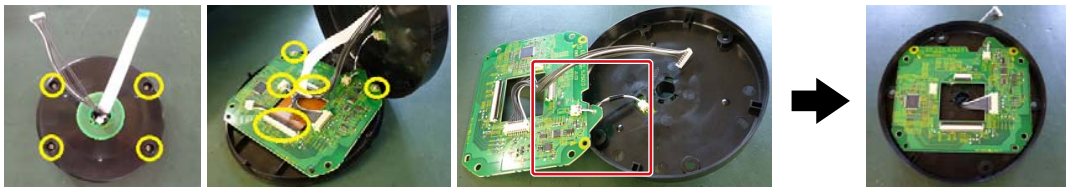
Turn over the Assy circled in red in the below figure.

- Confirm that the Sheet SW is installed correctly and that there is no dirt, damage or moisture contamination.
  ⇨ Install the Sensor (Sheet SW) correctly. Replace the Sheet SW if it is dirty, damaged or contaminated with moisture.
- Confirm the connection between the Sensor (Sheet SW) and the COIL2 Assy.
  ⇨ Repair if there are poor connections or bad soldering.



∗ If Shatf (DNK6785) is attached when checking DIAL Assy, remove it with tweezers and attach it to HOLDER.

③-3 Remove the four screws, and remove the cover. Disconnect the connectors except the 2-pin and 9-pin connectors, and turn over the JLCD Assy.

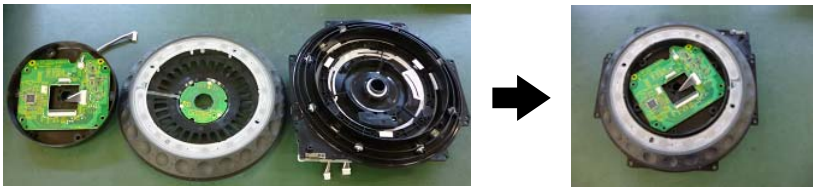


**- Diagnosis -**

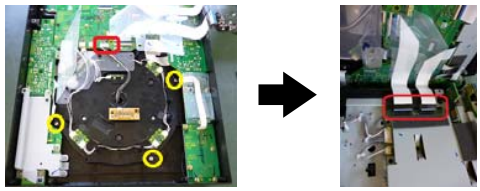
- Confirm the connection between the COIL1 Assy and the JLCD Assy circled in red in the above figure.
  ⇨ If it has any issue, repair it. Repair if there are bad soldering in the JLCD Assy.

④ Reassemble the JLCD Assy until the status that they are ready to diagnose.

④-1 Reassemble the three Assys in the below figure.

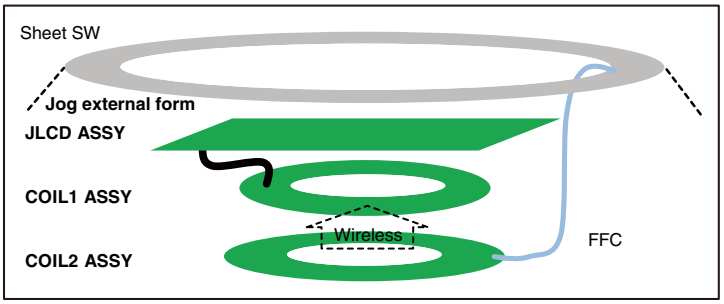


④-2 Reassemble the Assys in the Control panel Section. At this time, three screws are temporarily fixed, and connect 9-pin connector to the PNLB Assy. And, connect to the Chassis Section in this state.



④-3 Turn on the power, and start the diagnosis.

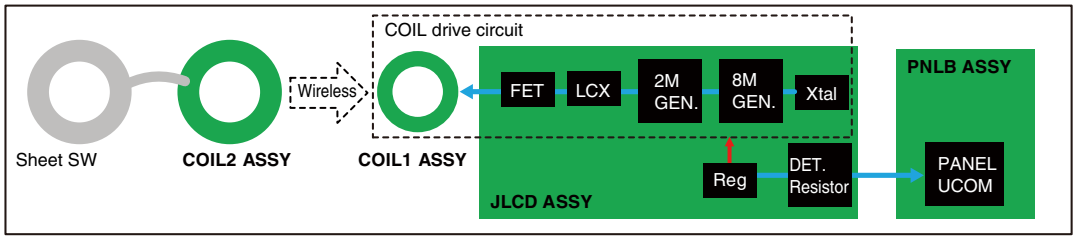
**Structural Image Diagram**




**- Diagnosis -**

- COIL drive circuit has the defective
  - ⇨ If the voltage on pin 5 of IC7002 (LDO) does not reach 3.3 V, replace the IC7002.
  - ⇨ If the clock on 4 pin of IC7003 (LOGIC) is not 8 MHz, replace X7001 (Resonator) or IC7003.
  - ⇨ If the clock on 8 pin of IC7004 (LOGIC) is not 2 MHz, replace IC7004.
  - ⇨ If the clock on the gate side of Q7003 (FET) is not 2 MHz, replace IC7006 (LOGIC).
  - ⇨ If 2 pin of CN7003 dose not have 2 MHz half-wave waveform, replace Q7003 (FET).

**Structural Image Diagram**




- Confirm the signal (JOG_SW) on 2 pin of CN7002
  - ⇨ When the jog is touched, the JOG_SW signal changes from about 0.5 V (touch off) to about 1.5 V (touch on). If the signal has any problem, replace the JLCD Assy, the COIL2 Assy, and the COIL1 Assy in that order.

## [Important] Caution after the repairing

Refer to "[Important] Caution after the repairing" in Case1.

# 5.4 VOLTAGE MONITORING CIRCUIT

## ■ Voltage-Monitoring

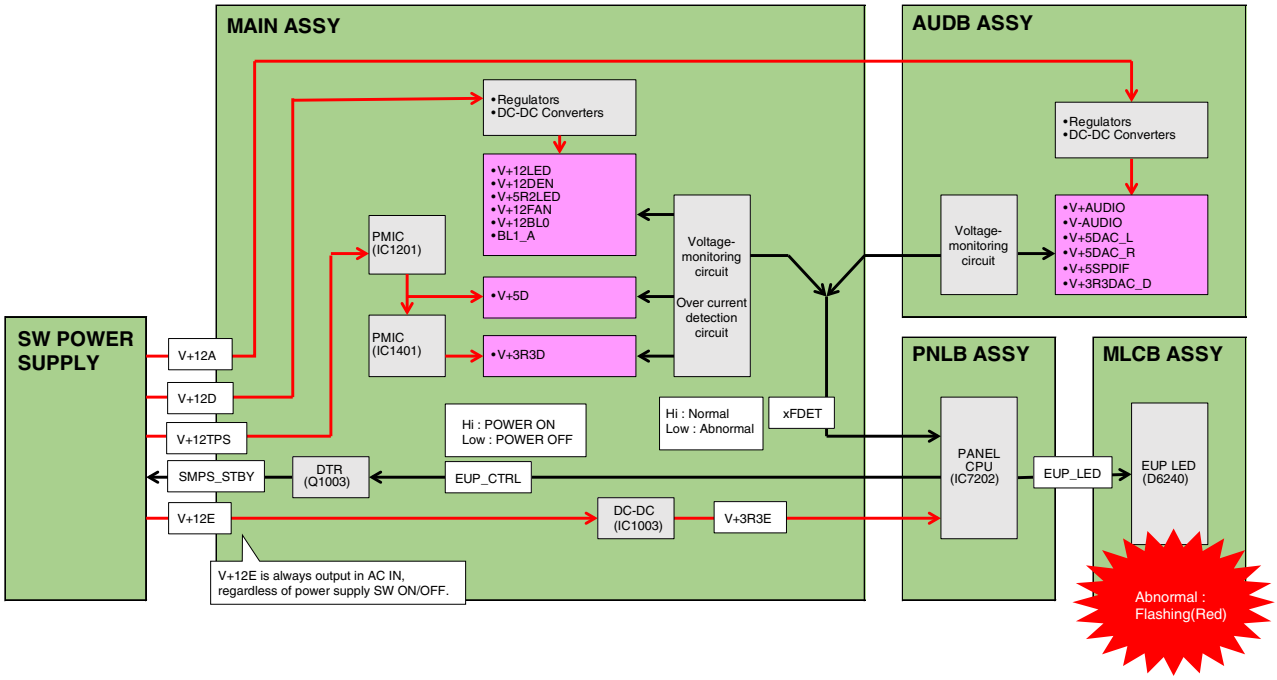
This unit monitors the voltages of the main power-supply ICs, using the xFDET signal.
The xFDET signal level is high (+3.3 V) during normal operations. When the level becomes low (0 V), detect abnormality in the PANEL CPU (IC7202).

## ■ Product behavior when an error is generated

The SOURCE indicator flashes in red.
As the V+12TPS, V+12D, V+12A power is stopped, the indications other than the SOURCE indicator are light off and all the switches and VRs are disabled.
The PANEL CPU will stop supplying the V+12TPS, V+12D, V+12A power from SW POWER SUPPLY, setting the EUP_CTRL signal to low.

## ■ Diagnostic procedure

**Caution : Each time before turning the unit ON, make sure that each power-supply IC is not short-circuited to GND.**
If any voltage is abnormal, that error will be detected by the voltage-monitoring program after it is started after a usual startup of the unit. Then the V+12TPS, V+12D, V+12A power from SW POWER SUPPLY will be stopped.
Identify which power-supply IC is defective, by repeat power supply ON/OFF while monitoring each voltage with an oscilloscope. Check the value of each voltage immediately before stopping power supply.

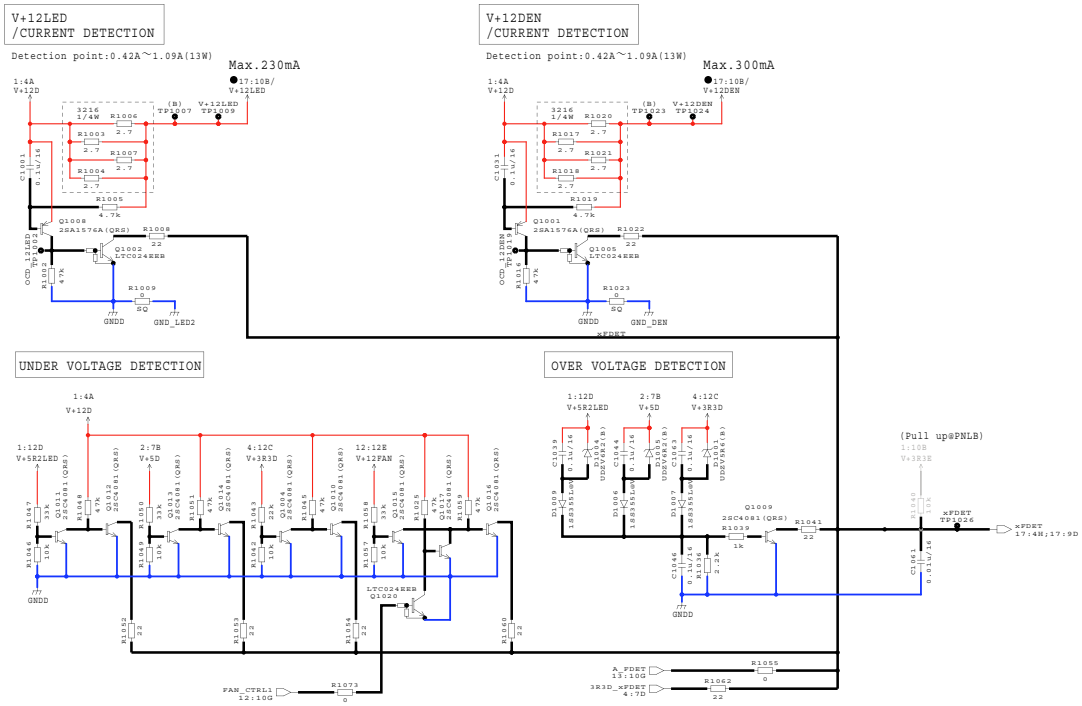


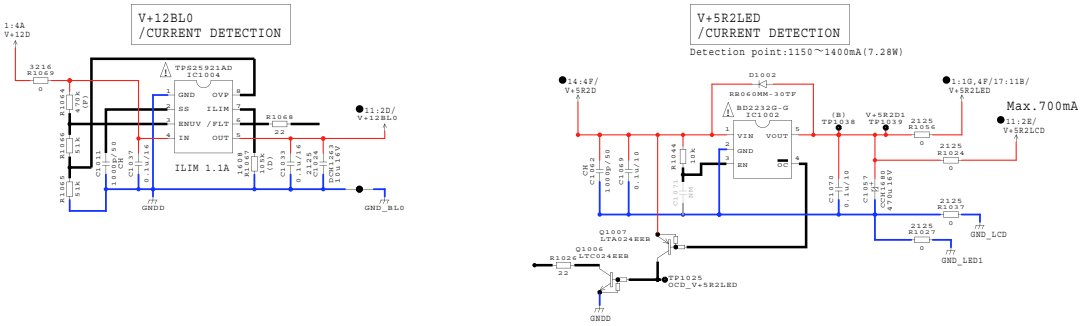

## ■ Voltage value and Current value of the voltage-monitoring section

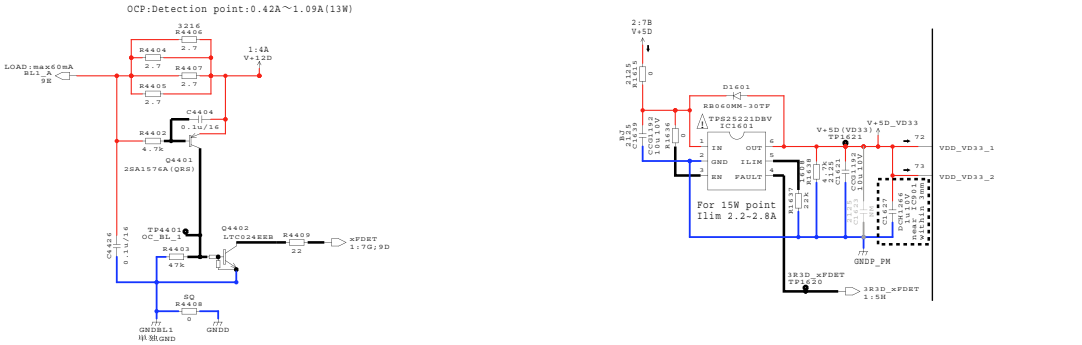
| Power | UVP | OVP | OCP | Power | UVP | OVP | OCP |
|---|---|---|---|---|---|---|---|
| V+12LED | - | - | 0.89 A | V+3R3D | 1.92 V | 6.8 V | - |
| V+12DEN | - | - | 0.89 A | V+AUDIO | 2.58 V | - | - |
| V+5R2LED | 2.58 V | 7.4 V | 1.275 A | V-AUDIO | -2.58 V | - | - |
| V+12FAN | 2.58 V | - | - | V+5DAC_L | - | 7.4 V | - |
| V+5D | 2.58 V | 7.4 V | 2.6 A | V+5DAC_R | - | 7.4 V | - |
| V+12BL0 | - | - | 1.1 A | V+5SPDIF | - | 7.4 V | - |
| BL1_A | - | - | 0.89 A | V+3R3DAC_D | - | 6.8 V | - |

## ■ Voltage-Monitoring Circuit diagram

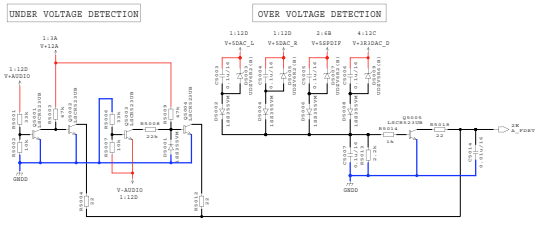
### ● MAIN ASSY




### ● AUDB ASSY



## 5.5 ERROR CODE DISPLAY

| Error code | Display word | Contents | Remarks |
|---|---|---|---|
| E-8302 | CANNOT PLAY TRACK | Abnormalities occurred during playback. | |
| E-8303 | CANNOT PLAY TRACK | Buffer memory writing error occurred. | |
| E-8304 | UNSUPPORTED FILE FORMAT | Decoding error occurred. | |
| E-8305 | UNSUPPORTED FILE FORMAT | This format is not supported. | |
| E-8306 | NO FILE | The registered file does not exist. | |
| E-8307 | •DEVICE NO RESPONSE.<br>•UNSUPPORTED DEVICE.<br>•HUBS ARE NOT SUPPORTED. | •Device no response.<br>•Unsupported device.<br>•Hubs are not supported. | An unsupported USB device is connected.<br>Either of the three error types will be displayed. |
| E-8308 | SD CARD ACCESS ERROR | You connected MMC (Multi Media Card). | |
| E-8309 | LINK ACCESS ERROR | Operation finished an error in four times continuous time-out. | |

## 5.6 CONNECTION CONFIRMATION WITH THE PC

### [USB B connector]

Whether communication between the PC connected via the USB B connector and this unit is properly performed or not can be confirmed on the PC.

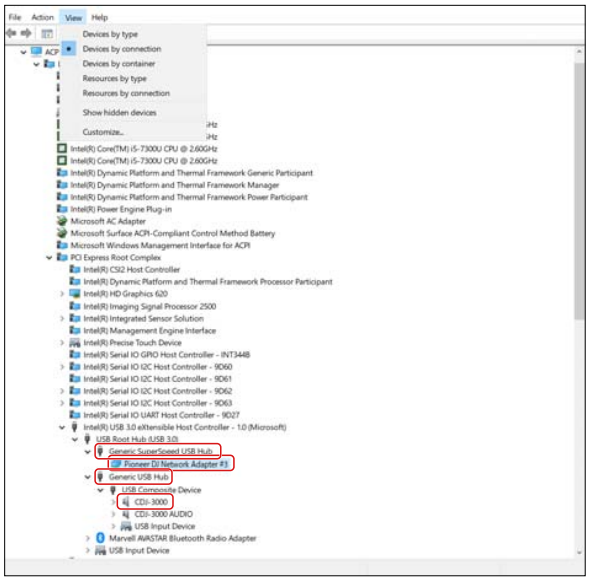
**Note:** You need to have installed drivers for CDJ-3000 on PC.

**■ Confirmation method**

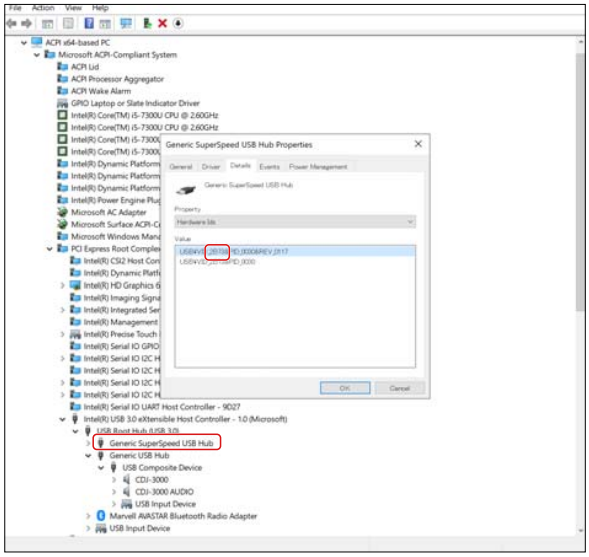
① Connect the PC and CDJ-3000 with a USB3.0 cable (Commercially available USB 3.0 certified product), open the device manager and display the connection hierarchy view,

①-1 Confirm that "Pioneer DJ Network Adapter" is displayed under "Generic SuperSpeed USB Hub".

①-2 Confirm that "USB Composite Device> CDJ-3000" is displayed under "Generic USB Hub".

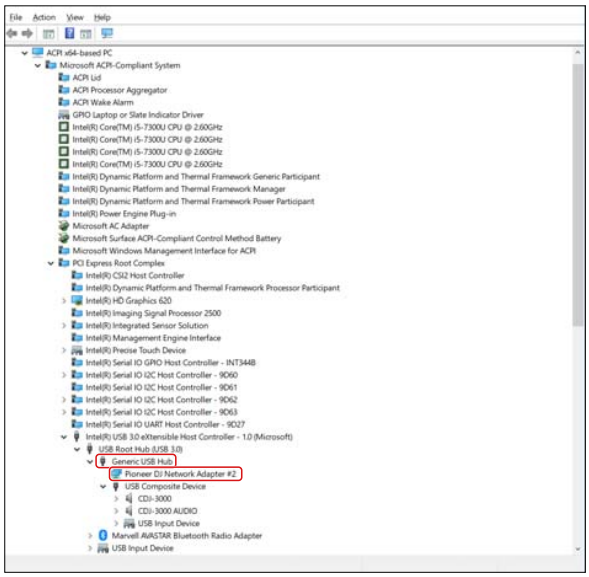


①-3 Right-click on the "Generic SuperSpeed USB Hub" icon above and select properties.
Set the property in the Details tab to "Hardware IDs" and confirm that the value includes "VID_2B73".




② Connect the PC and CDJ-3000 with a USB2.0 cable (GGP1193), open the device manager and display the connection hierarchy view,

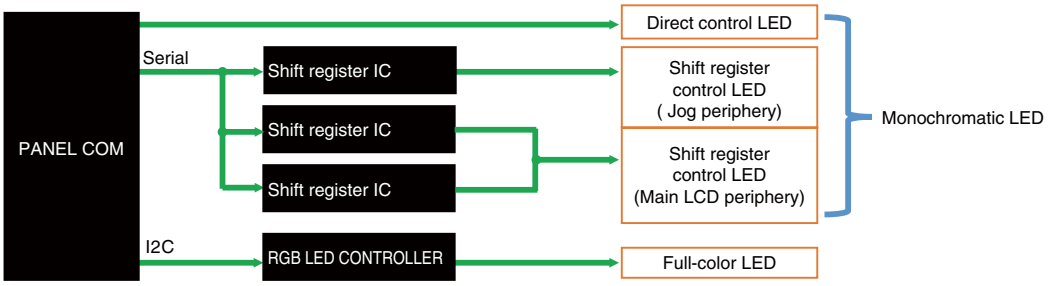
②-1 Confirm that "Pioneer DJ Network Adapter" is displayed under "Generic USB Hub".



# 5.7 ABOUT LED

## ■ Distribution diagram

There are three types of LED lighting controls as shown below.




## ■ Monochromatic LED

| Assy | Name | Color | Lighting control IC | Light on dimly | Power |
|---|---|---|---|---|---|
| JILM1-4 Assy | JILMW | Chip white | Direct control | | 5.2 V |
| | JILMR | Chip red ✳2 | Direct control | | 5.2 V |
| MLCB Assy | EUP | Chip red | Direct control | | 3.3 V |
| | BROWSE | Chip blue ✳2 | Shift register control | ○ | 12 V |
| | TAG LIST | Chip blue ✳2 | Shift register control | ○ | 12 V |
| | PLAYLIST | Chip blue ✳2 | Shift register control | ○ | 12 V |
| | SEARCH | Chip blue ✳2 | Shift register control | ○ | 12 V |
| | MEDIA | Chip white ✳2 | Shift register control | ○ | 12 V |
| | MENU | Chip white ✳2 | Shift register control | ○ | 12 V |
| | ENC | Chip white ✳2 | Shift register control | | 12 V |
| PNLB Assy | CUE/LOOP CALL ◄, ► | Chip amber ✳2 | Direct control | | 12 V |
| SUB1 Assy | TRACK SEARCH ⏮, ⏭ | Shell orange ✳2 | | | 12 V |
| | SEARCH ◄◄, ►► | Shell orange ✳2 | | | 12 V |
| | LOOP IN/CUE | Shell orange | Shift register control | | 5.2 V |
| | LOOP OUT | Shell orange | Shift register control | | 5.2 V |
| | LOOP RELOOP/EXIT | Shell orange | Shift register control | | 5.2 V |
| | 4 BEAT LOOP | Shell orange | Shift register control | | 5.2 V |
| | 8 BEAT LOOP | Shell orange | Shift register control | | 5.2 V |
| | BEAT JUMP ► | Shell white | Shift register control | | 12 V |
| | BEAT JUMP ◄ | Shell white | Shift register control | | 12 V |
| | SLIP | Shell red | Direct control | ○ | 5.2 V |
| | QUANTIZE | Shell red ✳2 | Direct control | ○ | 12 V |
| | REV | Shell red | Shift register control | | 5.2 V |
| SUB2 Assy | MASTER TEMPO | Shell red | Direct control | | 5.2 V |
| | MASTER | Shell orang ✳3 | Direct control | ○ | 12 V |
| | BEAT SYNC | Shell white ✳3 | Direct control | ○ | 12 V |
| | KEY SYNC | Shell blue ✳3 | Direct control | ○ | 12 V |
| | VINYL | Shell blue | Direct control | | 12 V |
| | CDJ | Shell green | Direct control | | 5.2 V |
| SLDB Assy | TEMPO RESET | Shell green | Direct control | | 5.2 V |
| KSWB Assy | PLAY/PAUSE ►/⏸ | Chip emerald green | Direct control | | 12 V |
| | CUE | Chip amber ✳2 | Direct control | | 12 V |
| | | Chip amber ✳3 | | | 12 V |

## ■ Monochromatic LED position

| | |
|---|---|
| EUP | Red |
| On MLCD Assy | White<br>Blue |
| ENC | White |
| QUANTIZE | Red |
| SLIP | Red |
| LOOP IN/OUT | Orange |
| LOOP RELOOP | Orange |
| 4/8 BEAT | Orange |
| BEAT JUMP | White |
| REV | Red |
| SEARCH | Orange |
| CUE | Orange |
| PLAY/PAUSE ►/II | emerald green |
| JILMW | White |
| JILMR | Red |
| CUE/LOOP CALL | Orange |
| VINYL | Blue |
| CDJ | Green |
| MASTER | Orange |
| BEAT SYNC | White |
| KEY SYNC | Blue |
| MASTER TEMPO | Red |
| TEMPO RESET | Green |

## ■ Shift register IC

| IC | Output | Name | |
|---|---|---|---|
| 74VHC595FT<br>IC7200<br>(PNLB Assy) | QA | LOOP RELOOP/EXIT | |
| | QB | LOOP OUT | |
| | QC | LOOP IN/CUE | |
| | QD | 8 BEAT LOOP | |
| | QE | 4 BEAT LOOP | |
| | QF | BEAT JUMP ► | |
| | QG | BEAT JUMP ◄ | |
| | QH | REV | |
| 74VHC595FT<br>IC6002<br>(MLCB Assy) | QA | | |
| | QB | MEDIA | Light on (100%) |
| | QC | BROWSE | |
| | QD | TAG LIST | |
| | QE | PLAYLIST | |
| | QF | SEARCH | |
| | QG | NEMU | |
| | QH | ENC | |
| 74VHC595FT<br>IC6003<br>(MLCB Assy) | QA | | |
| | QB | MEDIA | Light on dimly (10%) |
| | QC | BROWSE | |
| | QD | TAG LIST | |
| | QE | PLAYLIST | |
| | QF | SEARCH | |
| | QG | NEMU | |
| | QH | | |

## ■ Full-color LED

| Assy | Name | Color | Point | Number | Control line | Light on dimly | Lighting control | Vcc |
|---|---|---|---|---|---|---|---|---|
| MLCB | SOURCE indicator | Full-color | 1 | 1 | 3 | Non | RGB LED CONTROLLER | 5.2 |
| ILMB | SD | | 1 | 1 | 3 | When flashing | | 5.2 |
| | USB | | 1 | 2 | 6 | When flashing | | 5.2 |
| PNLB | HOT CUE A | | 1 | 1 | 3 | Only white when not set | | 5.2 |
| | HOT CUE B | | 1 | 1 | 3 | Only white when not set | | 5.2 |
| | HOT CUE C | | 1 | 1 | 3 | Only white when not set | | 5.2 |
| | HOT CUE D | | 1 | 1 | 3 | Only white when not set | | 5.2 |
| | HOT CUE E | | 1 | 1 | 3 | Only white when not set | | 5.2 |
| | HOT CUE F | | 1 | 1 | 3 | Only white when not set | | 5.2 |
| | HOT CUE G | | 1 | 1 | 3 | Only white when not set | | 5.2 |
| | HOT CUE H | | 1 | 1 | 3 | Only white when not set | | 5.2 |

## ■ Full-color LED position

# 6. SERVICE MODE
## 6.1 SERVICE MODE

### OUTLINE OF THE SERVICE MODE

The following service modes are prepared for this product.

| Service mode | Overview |
|---|---|
| 1/10: VERSION INFORMATION | Various information such as version number of each CPU and the MAC address are displayed. |
| 2/10: LED ALL ON, LCD CHECK | The mode to check LED operation. All LEDs light on, and the color pattern is displayed in the Touch display. |
| 3/10: LED ALL OFF, LCD BLACK | The mode to check LED operation. All LEDs lights off, and the black screen is displayed in the Touch display. |
| 4/10: CHECK MODE OF OPERATORS | The mode to check operators such as buttons, analog operators and JOG, and check display. |
| 5/10: TOUCH PANEL CHECK | The mode to check and calibrate the touch panel. |
| 6/10: JOG LCD CALIBRATION PAGE | The mode to calibrate the JOG LCD. |
| 7/10: FAN OPERATION CHECK PAGE | The mode to check the fan operation in the product. |
| 8/10: THERMOMETER CHECK PAGE | The mode to check the operation of the thermometer mounted in the product. |
| 9/10: UPD PORT CHECK | The mode to check the UPD Port. |
| 10/10: FACTORY RESET and AUTO STANDBY MODE | The mode to execute the Factory Reset and check the Auto Standby. |

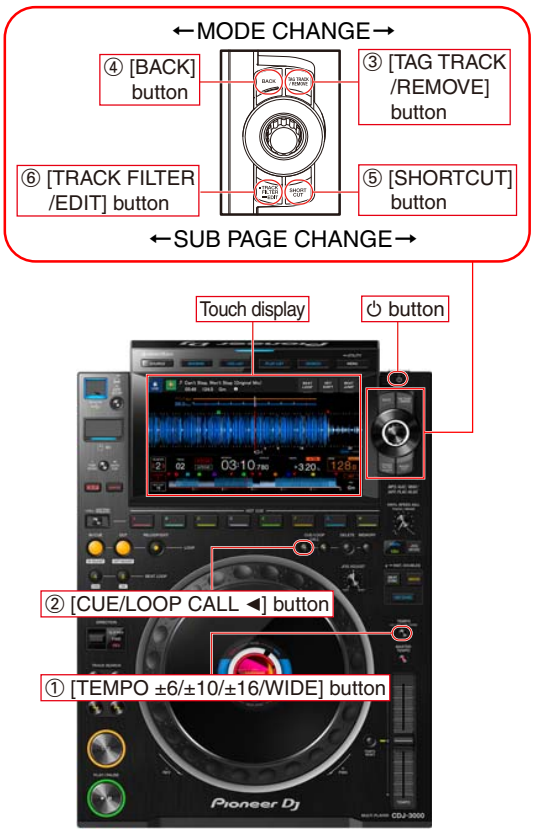
Furthermore, the following expansion pages are prepared for.

| | |
|---|---|
| 11: THE JOG LOAD CHECK MODE | The mode to measure load of the JOG Dial. |

### How to use the SERVICE MODE

#### ■ How to start

- If the ⏻ button is pressed while the ① [TEMPO ±6/±10/±16/WIDE] button and ② [CUE/LOOP CALL ◄] button is pressed simultaneously.
- [SERVICE MODE] will be displayed on the Touch display that the service mode has started.
  (Please keep pressing until "Pioneer DJ" logo displays.)




#### ■ How to switch the each service modes

[MODE CHANGE]
- If you want to switch the each service mode, press the ③ or ④ button.
- ③ [TAG TRACK/REMOVE] button: Switch to the next service mode
- ④ [BACK] button: Switch to the previous service mode

[SUB PAGE CHANGE]
- If the service mode have the sub page more than 2 pages, you can switch its using ⑤ or ⑥ button.
- ⑤ [SHORTCUT] button: Switch to the next page
- ⑥ [TRACK FILTER/EDIT] button: Switch to the previous page

#### ■ How to enter the expansion page 11: THE JOG LOAD CHECK MODE

- Turn the [VINYL SPEED ADJ. TOUCH/BRAKE] knob to a maximum with any screen.
  (but the operators check mode is excluded)

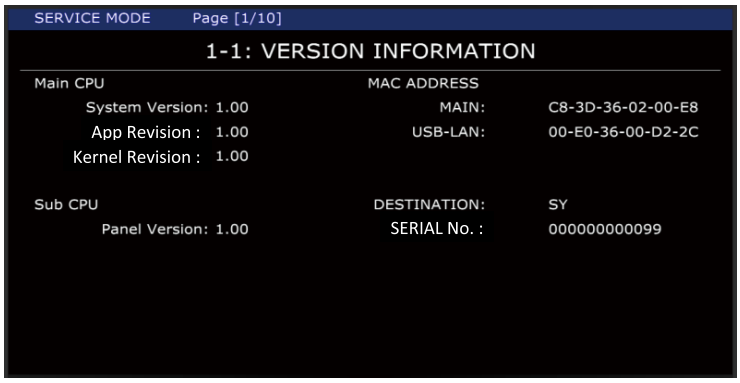
#### ■ How to end the service mode

- Turn off the power.

# DETAILS OF THE SERVICE MODE

## [Mode 1/10] VERSION INFORMATION

- SUB PAGE [1-1]: Display of Version information (Touch display)



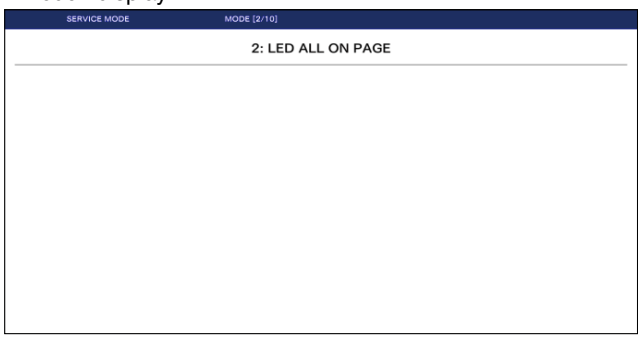

- You can check the various information such as the version number of microcomputer in this page.
  The displayed items are as follows.
  - Main CPU
    - System Version: The version number of MAIN CPU
    - App Revision: The App revision number of MAIN CPU
    - Kernel Revision: The Kernel revision number of MAIN CPU
  - Sub CPU
    - Panel Version : Version number of SUB CPU
  - MAC ADDRESS
    - MAIN: The MAC address of the Ethernet built in the product
    - USB-LAN: The MAC address of USB-LAN
      ※ In order to correctly display the MAC address of USB-LAN, the following two points must be noted.
      - Connect this unit's USB-B to the PC and start the rekordbox
      - Do not connect anything to the LAN terminal of this unit
  - DESTINATION: Destination code
  - SERIAL No.: Serial number

**[Warning indication when JOG LCD calibration is not performed]**

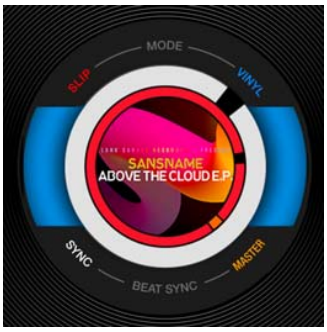
If the JOG LCD calibration has not been performed, the JOG ring will flash.
Perform the JOG LCD CALIBRATION MODE. (Refer to "6.2 JOG LCD CALIBRATION")

## [Mode 2/10] LED ALL ON, LCD CHECK

- Touch display




- Jog display




**[Detail of this mode]**

- You can check the state of all LEDs in the single and in the full-color, and also check color patterns on the Touch display.
- All LEDs shown in the following image light on when you enter this page, and then the page title is hidden and the white screen is displayed on the Touch display and Jog display.
- The initial state of full-color LED is white indication.
- Press [TRACK FILTER/EDIT] or [SHORTCUT] button to switch the color of full-color LED and the color pattern on the Touch display.
  However, the Jog display always displays the white screen.
- You can check the JOG LED Red indication only when the color pattern displays the red screen on the Jog display.

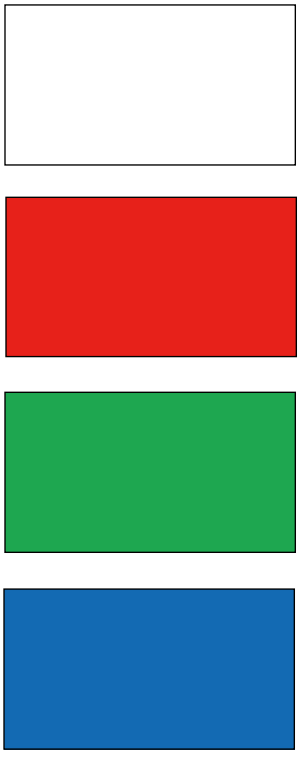
**[LED lighting location]**

: Full-color LED (These color change according to the color pattern)
: Monochromatic LED

**[Color pattern]**

[TRACK FILTER/EDIT] button

[SHORTCUT] button



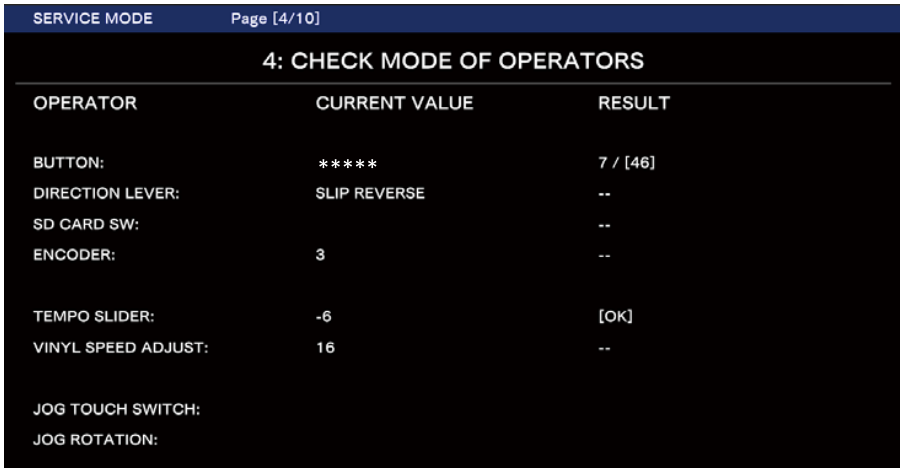
## [Mode 3/10] LED ALL OFF, LCD BLACK

- Touch display

- You can see the state that all LEDs light off.
- After switching this page, the page title is hidden and the black screen is displayed on the Touch display. The JOG LCD also display the black screen.
- While pressing [PLAY/PAUSE ►/II] button, the Standby LED lights on.

## [Mode 4/10] CHECK MODE OF OPERATORS

- Touch display




**[Detail of this mode]**

- You can check whether the buttons, analog operators, JOG dial and the Touch display on the product work normally or not.

### ■ Buttons

- Self-lighting button lights on in the initial state, and lights off when the button is pressed.
- While any buttons are pressed, its button name is displayed in ***** part in the "CURRENT VALUE" on the figure.
- The count in the left side of "RESULT" on the figure is added each time the button is normally input.
- When the all buttons are normally input, [OK] is displayed in the right side of "RESULT".

### ■ Direction Lever

- Depending on the status of the direction lever switch, [FWD], [REVERSE] or [SLIP REVERSE] will be displayed in the "CURRENT VALUE". When all three status are detected, [OK] is displayed in the "RESULT".

### ■ SD Card Switch

- Depending on the status of the SD Card Switch, [OPEN] or [CLOSE] will be displayed in the "CURRENT VALUE". If both status are detected, [OK] is displayed in the "RESULT".

### ■ Analog Operators (Encoder, Tempo Slider, Vinyl Speed Adjust Knob)

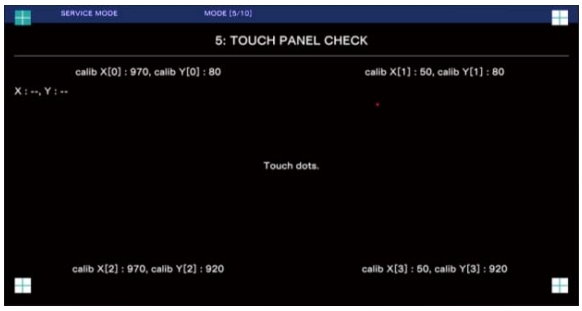
- Current analog value of each operator is displayed in the "CURRENT VALUE".
- If you move the operators, the current value change according to the change in the value.
- When the value of both ends are detected in each operator, [OK] is displayed in the "RESULT".

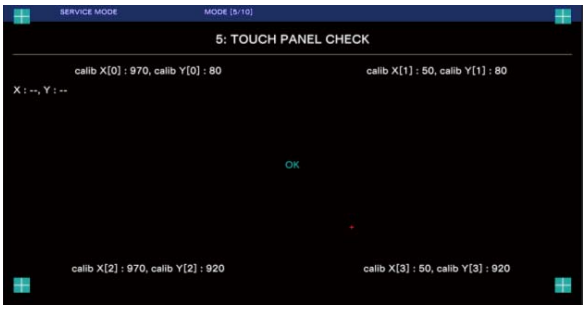
### ■ JOG Dial

- JOG TOUCH SW: "ON" is displayed while you touch JOG dial.
- JOG ROTATION: The rotation direction of JOG is displayed.
- The JOG LED in white lights on during forward rotation, and the JOG LED in red lights on during reverse rotation.

## [Mode 5/10] TOUCH PANEL CHECK

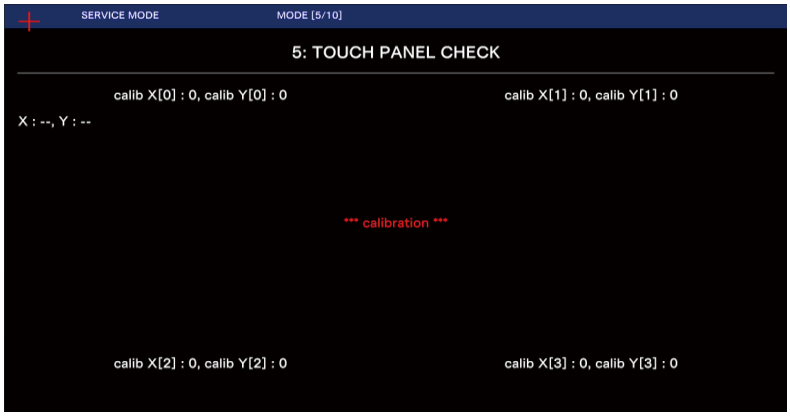
**[Touch Panel Check]**


SERVICE MODE
MODE [5/10]
5: TOUCH PANEL CHECK
calib X[0] : 970, calib Y[0] : 80
calib X[1] : 50, calib Y[1] : 80
X : --, Y : --
Touch dots.
calib X[2] : 970, calib Y[2] : 920
calib X[3] : 50, calib Y[3] : 920


SERVICE MODE
MODE [5/10]
5: TOUCH PANEL CHECK
calib X[0] : 970, calib Y[0] : 80
calib X[1] : 50, calib Y[1] : 80
X : --, Y : --
OK
calib X[2] : 970, calib Y[2] : 920
calib X[3] : 50, calib Y[3] : 920

- You can check accuracy of the touch panel. Touch the quadrangle at the four corners to turn it blue. (You should use a pointed touch pen.)
- When all the quadrangles are touched, [OK] is displayed on the display.
- If you touch a place other than quadrangles, "+" symbol is displayed on the place you touched.

**[Touch Panel Calibration]**


SERVICE MODE
MODE [5/10]
5: TOUCH PANEL CHECK
calib X[0] : 0, calib Y[0] : 0
calib X[1] : 0, calib Y[1] : 0
X : --, Y : --
*** calibration ***
calib X[2] : 0, calib Y[2] : 0
calib X[3] : 0, calib Y[3] : 0

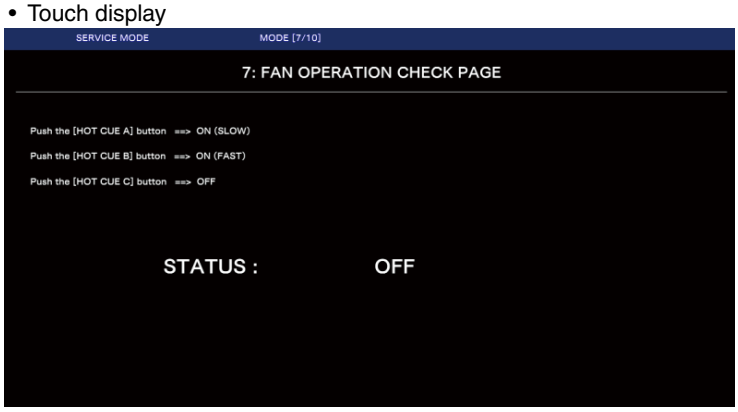
- You can switch from CHECK MODE to CALIBRATION MODE by pressing [LOOP RELOOP/EXIT] button.
- Calibration is performed in the following 4 steps.
  ① While touching the center of "+" symbol in red on the top left, press [LOOP RELOOP/EXIT] button.
  ② While touching the center of "+" symbol in red on the top right, press [LOOP RELOOP/EXIT] button.
  ③ While touching the center of "+" symbol in red on the bottom left, press [LOOP RELOOP/EXIT] button.
  ④ While touching the center of "+" symbol in red on the bottom right, press [LOOP RELOOP/EXIT] button.
  (Note: If you press [LOOP RELOOP/EXIT] button without touching any place and end the calibration, the calibration value is discarded. Touch operation operates in the state without the calibration.)

## [Mode 6/10] JOG LCD CALIBRATION PAGE

Refer to "6.2 JOG LCD CALIBRATION".

## [Mode 7/10] FAN OPERATION CHECK PAGE

- Touch display


SERVICE MODE
MODE [7/10]
7: FAN OPERATION CHECK PAGE
Push the [HOT CUE A] button ==> ON (SLOW)
Push the [HOT CUE B] button ==> ON (FAST)
Push the [HOT CUE C] button ==> OFF
STATUS :
OFF

- You can check the FAN operation.

**[Operators]**

- [HOT CUE A] button: FAN rotates slowly.
- [HOT CUE B] button: FAN rotates fast.
- [HOT CUE C] button: FAN rotation become stop.

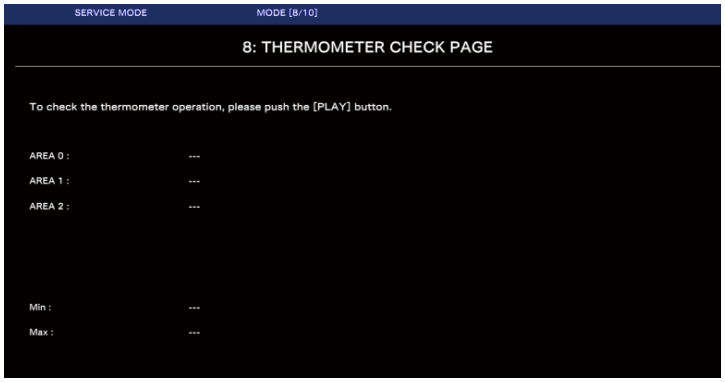
- The current rotation status is displayed on the right side of "STATUS".
- The rotation status is maintained even if the mode is switched.

**[Refer to it for the following repairs]**

- Check the operation after replacing Fan motor
- Check the operation after replacing MAIN Assy or FANB Assy

## [Mode 8/10] THERMOMETER CHECK PAGE

- Touch display



[PLAY/PAUSE ►/❚❚] button

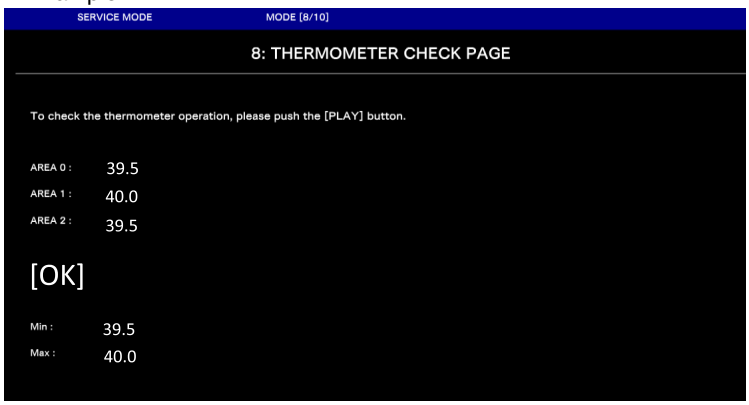
- You can check whether the three built-in thermometers installed in the product operate normally.
- When the [PLAY/PAUSE ►/❚❚] button is pressed, the measured values of the three thermometers of AREA 0 to 2 are displayed on the Touch display.

**[Judgement]**

① The detected temperature of all thermometers of AREA 0 to 2 is within 0 to 100 ℃
② The temperature difference between the three thermometers is within 10 ℃

When these conditions are met, [OK] is displayed. If not met, [NG] is displayed.

- Example

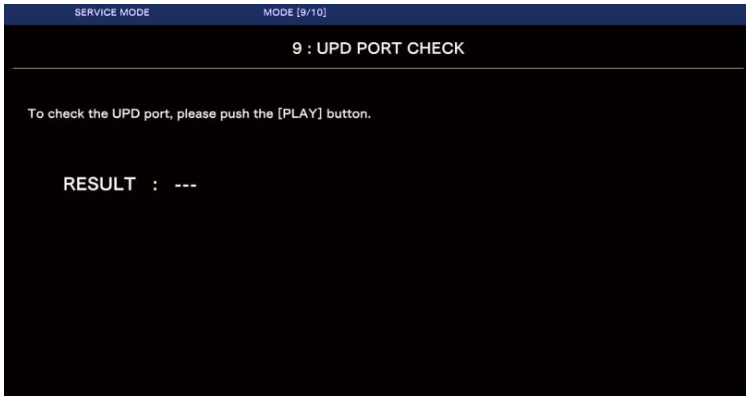



**[Refer to it for the following repairs]**

- Check the operation after replacing MAIN Assy
- Check the measured value of the thermometer when Fan motor has issue

## [Mode 9/10] UPD PORT CHECK

- Touch display



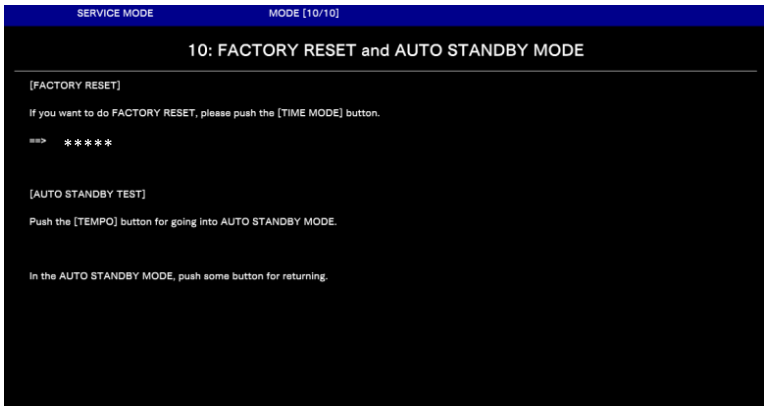
- You can check whether the update port used for updating the product is normally.
- When press [PLAY/PAUSE ►/❚❚] button, the check mode is started.
- The judgement result is displayed on the Touch display as [OK] or [NG].

**[Refer to it for the following repairs]**

- The firmware update caused a glitch

## [Mode 10/10] FACTORY RESET and AUTO STANDBY MODE

- Touch display


SERVICE MODE
MODE [10/10]
10: FACTORY RESET and AUTO STANDBY MODE
[FACTORY RESET]
If you want to do FACTORY RESET, please push the [TIME MODE] button.
==> *****
[AUTO STANDBY TEST]
Push the [TEMPO] button for going into AUTO STANDBY MODE.
In the AUTO STANDBY MODE, push some button for returning.

- You can check the auto standby function, and perform FACTORY RESET.

**[Factory Reset]**

- You can use when you want to reset the UTILITY settings to the factory settings.
- If [TIME MODE/AUTO CUE] button is pressed on this mode, the settings are reset to the following factory setting. When the reset is completed, "Complete" is displayed in ****** on the Touch display.

  - [UTILITY] DJ SETTING:
    EJECT / LOAD LOCK = UNLOCK
    QUANTIZE BEAT VALUE = 1 beat
    BEAT JUMP BEAT VALUE = 16 beat
    HOT CUE AUTO LOAD = ON
    HOT CUE COLOR = OFF
    AUTO CUE LEVEL = MEMORY
    VINYL ADJUST = TOUCH
    PLAY MODE = SINGLE
  - [UTILITY] DISPLAY (LCD):
    LCD BRIGHTNESS = 3
    JOG LCD BRIGHTNESS = 3
    LANGUAGE = <Shipment setting>
    JOG DISPLAY ARTWORK = NORMAL
    SCREEN SAVER = ON
    TOUCH DISPLAY CALIBRATION
  - [UTILITY] DISPLAY (INDICATOR):
    SLIP FLASHING = ON
    ON AIR DISPLAY = ON
    JOG BRIGHTNESS = 2
    JOG INDICATOR = ON
  - [UTILITY] PRO DJ LINK:
    PLAYER No. = AUTO
    DUPLICATION = ALL
    MIDI CHANNEL = 1;
  - [UTILITY] SYSTEM :
    AUTO STANDBY = ON
    HISTORY NAME = "HISTORY"
    DEFAULT = CANSEL
  - Other settings:
    TIME MODE = REMAIN
    AUTO CUE = OFF
    JOG MODE = CDJ
    MASTER TEMPO = OFF
    QUANTIZE = ON

**[Auto Standby Check]**

- Auto Standby Mode is started when there is no media to play and when the operation is not performed for a certain period of time. However, you can immediately switch to Auto Standby Mode by pressing [TEMPO ±6/±10/±16/WIDE] button.
- Perform one of the operations except for the following operations to return from Auto Standby Mode to normal mode.

  - Exception Operator: Press [USB STOP] button
    Touch or rotate JOG
    Operate VINYL SPEED ADJ. TOUCH/BRAKE Knob
    Operate TEMPO Slider
    Switch DIRECTION FWD, REV, SLIP REV Lever

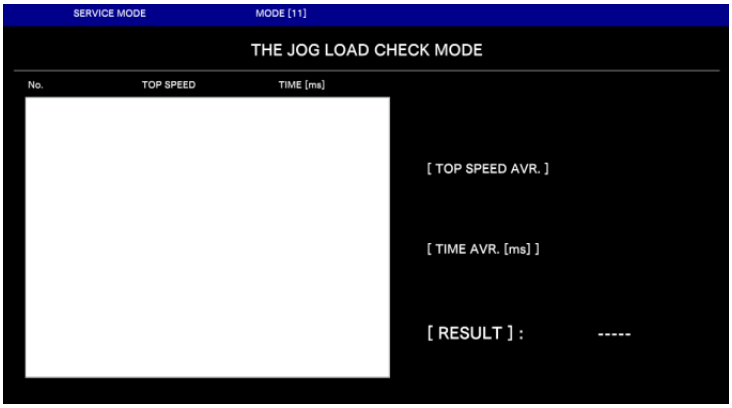
- When you need to exit this mode, turn off the power.

## [Mode 11] UPD PORT CHECK

### ■ How to enter the expansion page 11: THE JOG LOAD CHECK MODE

- Turn the [VINYL SPEED ADJ. TOUCH/BRAKE] knob to a maximum with any screen. (but the operators check mode is excluded)
- Turn the knob back to switch to another mode, then the current Service mode changes to THE VARIOUS INFORMATION MODE.

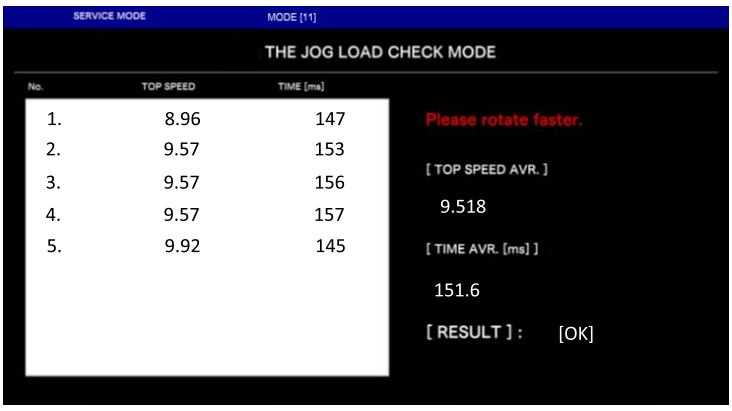
- Touch display




- The load (light or heavy) on the JOG dial when it is turned can be objectively judged in this mode.
- When the JOG dial is rotated swiftly in this mode, the speed is measured. Either direction, clockwise or counterclockwise, is OK. The meaning of the numerical value displayed is as follows.
  TOP SPEED : Maximum speed given that normal speed is defined as when one rotation takes 1.8.
  TIME : Time required for the JOG dial to slow down from 3x speed to 1.5x speed. (msec)

- To measure the time required for slowdown, the maximum speed must be 7 times normal speed or higher. If the maximum speed does not reach 7.0 times normal speed, the "Please rotate faster." is displayed as a warnig.
- When the measurement is carried out several times in a row, TIME will be displayed as an average of maximum 99 times of the measurement. This evens out the measurement value.

- EXAMPLE: The result when measured 5 times.




- You can measure up to max 99 times to calculate the average.

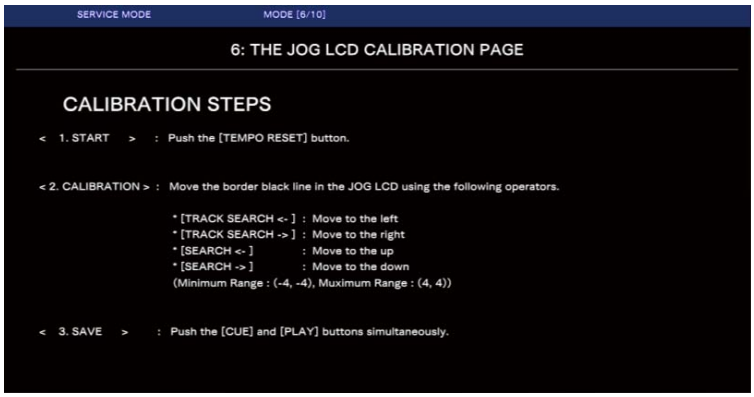
**[Judgement result]**

- Measure it more than 5 times in succession.
- After the fifth and subsequent measurements, if the measured time average (TIME AVR.) is within a certain range, [OK] will be displayed in the right side of "RESULT". If not, [NG] will be displayed.
  The judgement value for this is 170 ±20 msec with JOG ADJUST center position.

# 6.2 JOG LCD CALIBRATION

- The displacement between JOG LCD and LCD Sheet is corrected in this mode.

  - Touch display



**[Operators List]**

| | | |
|---|---|---|
| ① | [TRACK SEARCH I◀◀] button | : Move the black line by one pixel to the left. |
| | [TRACK SEARCH ▶▶I] button | : Move the black line by one pixel to the right. |
| ② | [SEARCH ◀◀] button | : Move the black line 1 pixel upward. |
| | [SEARCH ▶▶] button | : Move black line 1 pixel downward. |
| ③ | [PLAY/PAUSE ▶/II], [CUE] button | : Save by pressing its simultaneously. |
| ④ | [TEMPO RESET] button | : Calibration starts again by pressing it. |

**[Initial state]**

All LEDs flash. The following is displayed on the JOG display

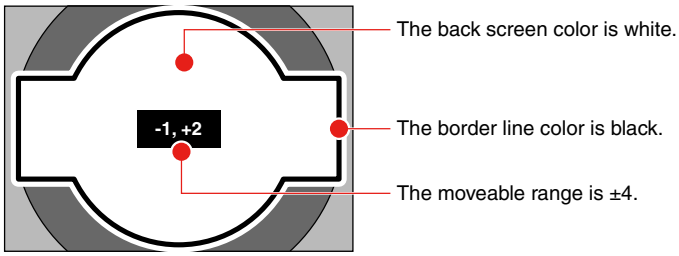
※ If this mode has been performed in the past, it will be displayed in the state saved previously.

**[Confirmation Procedure]**

(1) Press ④[TEMPO RESET] button.
(2) Press buttons ① and ② to move the black line. Refer to [Operators List] for the direction of movement.
The movable range is up to 4 pixels in each direction from the initial state.
(3) Press ③[PLAY/PAUSE ▶/II] and [CUE] buttons simultaneously, and save the result.
If the saving is completed, the LEDs of ①, ② and ③ buttons light off.

Press ④[TEMPO RESET] button, Calibration starts again. (LEDs of ①, ② and ③ buttons light on again)
※ When restarting the Calibration, it starts from the last saved state. It is the same about the position of the black line of the JOG display.

- JOG display




**[Warning display when Calibration does not start]**

If Calibration does not perform, JOG ring flashes in VARIOUS INFORMATION mode.
Refer to "6.1 SERVICE MODE_VARIOUS INFORMATION [Mode 1/10]".

**[Confirmation method in this mode]**

If LCD Calibration does not perform: JOG ring flashes (MAX brightness → OFF → MAX brightness...)
If LCD Calibration performed: JOG ring lights off

# 6.3 ABOUT THE DEVICE

| Device Name | Function | Part No. | Ref. No. | Assy |
|---|---|---|---|---|
| MAIN CPU | Main CPU | R8A774A0HC01BG@V (NSP) | IC1801 | MAIN Assy |
| FLASH (eMMC) | Memory for MAIN CPU (Firmware) | DYW**** (NSP) ∗1 | IC2802 | |
| LPDDR4 | DRAM for MAIN CPU | K4F8E3S4HB-MFCJ | IC2401, IC2601 | |
| PMIC | Power management IC for MAIN CPU | BD9571MWF | IC1401 | |
| USB-B HUB | USB-B HUB (for function) | RTS5412E-GR | IC3602 | |
| FLASH | Memory for USB-B HUB (Program) | MX25L4006EM2I-12G (NSP) | IC3603 | |
| USB-LAN Conversion (NIC ; Network Interface Card) | Conversion IC for USB communication from USB-HUB converts LAN communication | RTL8153B-VB-CG (NSP | IC3802 | |
| LAN-HUB | LAN communication connect to MAIN CPU (LAN conversion on LAN terminal "LINK" or "USB-LAN Conversion") | RTL8367SB-CG | IC4001 | |
| LVDS Tx | Conversion IC for RGB signal to LVDS signal. Output to JLCD Assy. | BU8254KVT | IC4401 | |
| LVDS Rx | Conversion IC for LVDS signal to RGB signal. Output to JOG LCD. | BU90R104 | IC7005 | JLCD Assy |
| Digital interface (DIT) | SPDIF transmission (Digital audio output) | AK4104ET | IC5301 | AUDB Assy |
| AUDIO DAC | Analog audio output | AK4490EQ | IC5401 | |
| OP AMP | Low pass filter fc = 72 kHz analog audio output | NJM8801E | IC5402, IC5403 | |
| OP AMP | Conversion IC for Balance signal into Unbalanced signal | OPA1678ID | IC5404, IC5405 | |
| LCD BACKLIGHT DRIVER | Backlight control driver for Main LCD panel | IS31BL3555-ZLS4 | IC6004 | MLCB Assy |
| PANEL CPU | Button input, LED and Touch panel control | DYW**** ∗1 | IC7202 | PNLB Assy |
| RGB LED CONTROLLER | Full-color LED control | IS31FL3236AQFLS2 | IC7203 | |

∗1: **Note on DYW****

The "****" part of the part number changes each time the firmware is updated.

Two or more FLASH and SDRAM are mounted in this unit.
Please judge the device which you should diagnose in reference to this list.

# 7. DISASSEMBLY

**Note:**
Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

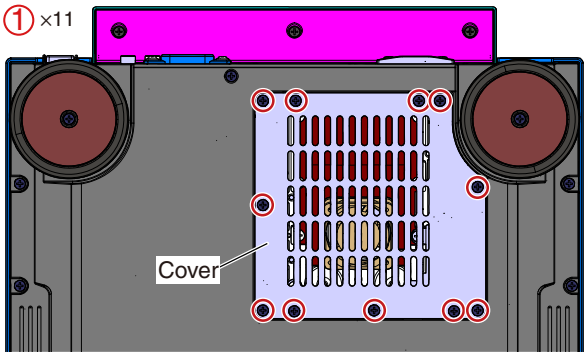
## Disassembly

### [1] Fan motor Section

① Remove the 11 screws and then remove the Cover.
(BBZ30P080FTB)

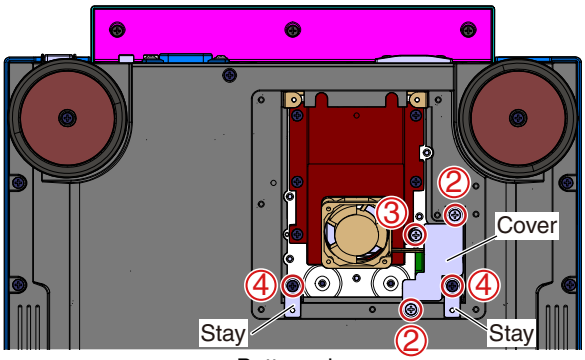
**Caution :**
Be sure to use the following screw at the reassembling!

BBZ30P080FTB



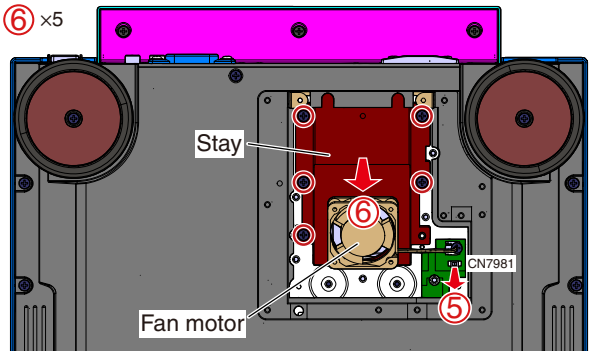

• Bottom view

② Remove the 2 screws
(BPZ30P080FNI)
③ Remove the 1 screw and then remove the Cover.
(BBZ30P080FTB)
④ Remove the 2 screws and then remove the Stay.
(BBZ30P060FTB)




• Bottom view

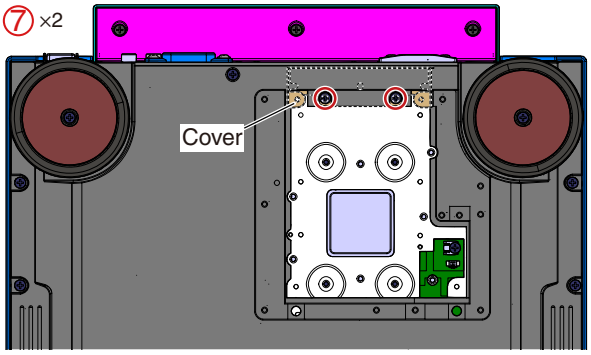
⑤ Disconnect the 1 connector.
(CN7981)
⑥ Remove the 5 screws and then remove it while pulling out the Fan motor with Stay toward you.
(BBZ30P060FTB)




• Bottom view

**Exchange, cleaning**

⑦ Remove the 2 screws and then remove the Cover.
(BBZ30P060FTB)
※ If it is necessary to remove only the Fan, this procedure is not necessary.




• Bottom view

## [2] Chassis Section

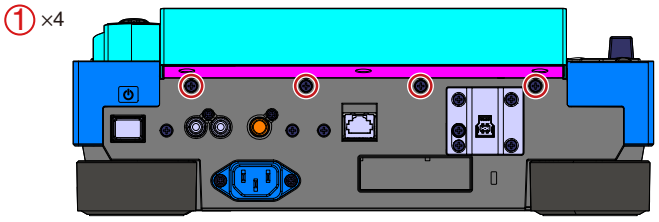
※ If it is not necessary to remove FANB Assy, the procedure of "[1] Fan motor Section" is not necessary.

### [2-1] Control panel Section

① Remove the 4 screws.
(BBZ30P060FTB)

**Caution :**
Be sure to use the following screw at the reassembling!

BBZ30P060FTB

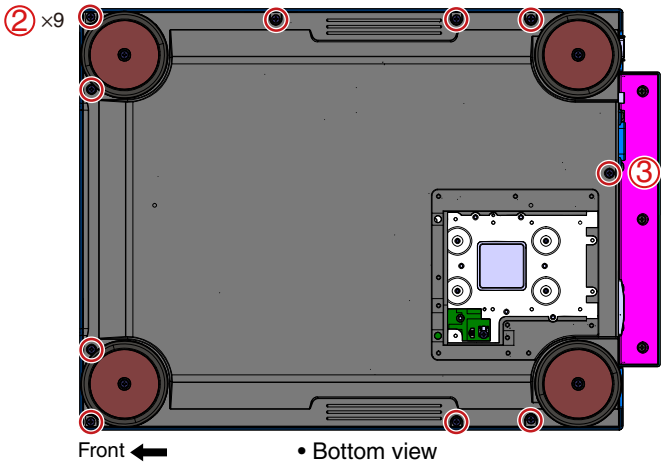



• Rear view

② Remove the 9 screws.
(BPZ30P100FTB)

**Caution :**
Be sure to use the following screw at the reassembling!

BPZ30P100FTB

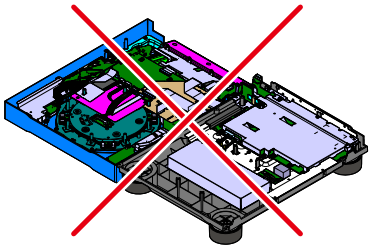


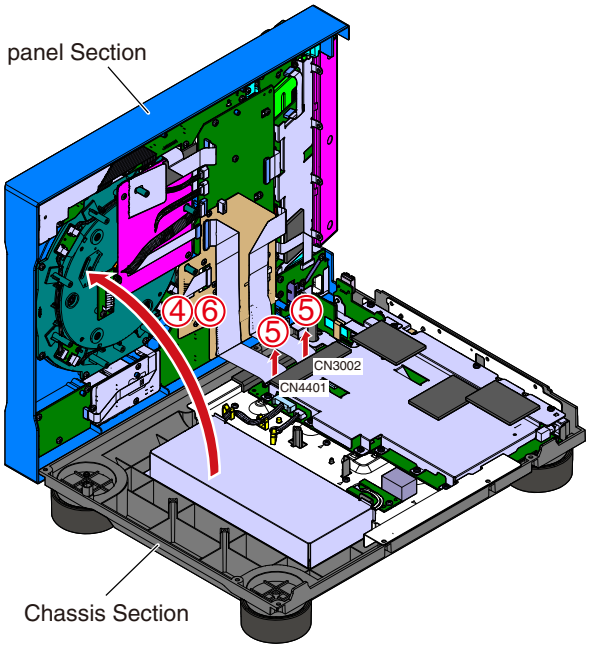

• Bottom view

③ Remove the 1 screw.
(BBZ30P080FTB)
※ If it is necessary to remove only the Control panel Section, this procedure is not necessary.

④ Open the Control panel Section in the direction of the arrow.

**Caution:**
The two FFCs that connect between the Control panel section and the Chassis section are short in length.
Therefore, they cannot be opened 180 degrees with the FFCs still connected.





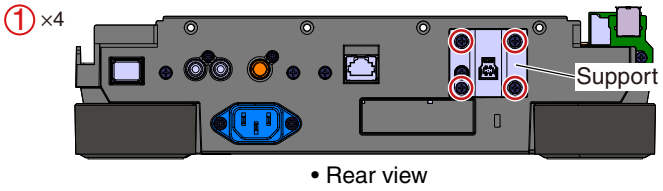

⑤ Disconnect the 2 FFCs.
(CN3002, 4401)

**Caution:**
The locking function of the connectors of CN3002, 4401 is fragile. Therefore, when locking or unlocking, it is necessary to work so that the force equally applies to both sides with both hands.
Also, we need to be careful not to overpower.

⑥ Remove the Control panel Section.

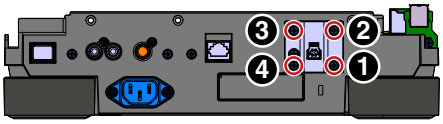
**[2-2] Shield case**

① Remove the 4 screws and then remove the support.
(BBZ30P080FTB)



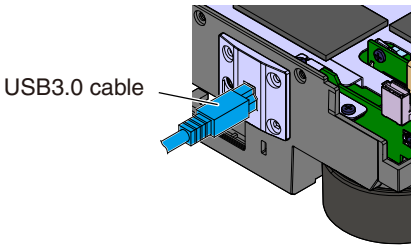

• Rear view

**Screw tightening order**



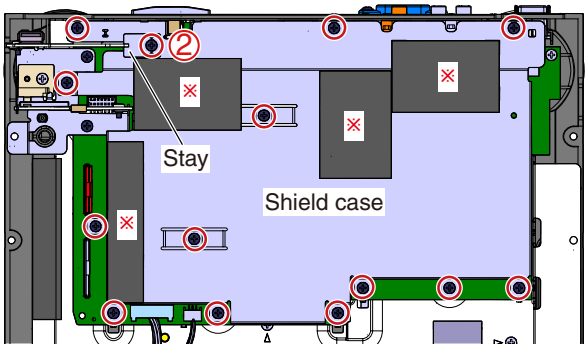

## ■ Notes on disassembly

USB terminal is fragile. When installing the USB terminal, insert the USB 3.0 cable into the terminal to hold it in position.



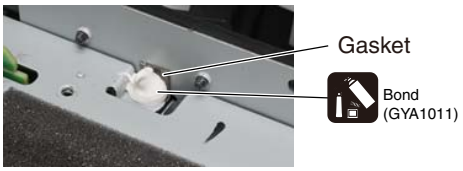
② Remove the 1 screw and then remove the Stay.
(BBZ30P060FTB)
③ Remove the 13 screws and then remove the Shield case.
(BBZ30P060FTB)

**Notes ※ :**
There is a sponge for radio wave protection attached to the marked area on the Shield case. Atattch a new one when replacing the Shield case.



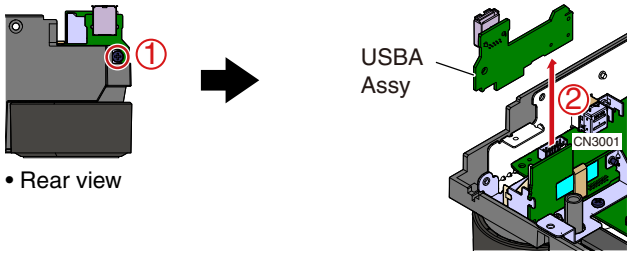

## ■ Notes on disassembly

Confirm that the gasket affixed to the shield case is placed between USB terminal and the Shield case. And, apply the bond after reassembling.

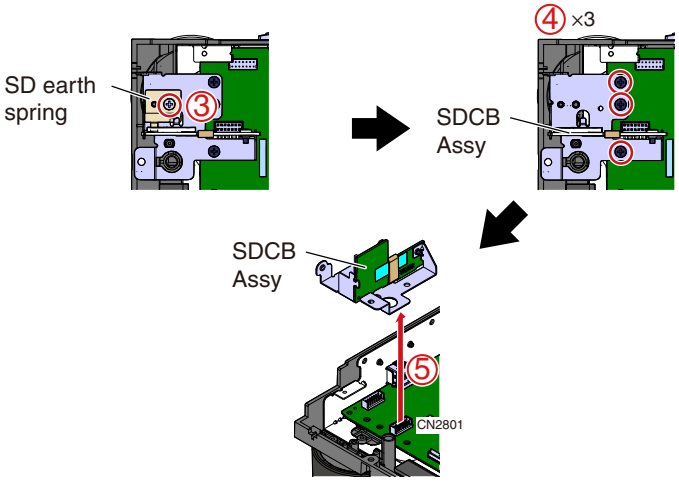



### [2-3] USBA and SDCB Assemblies

① Remove the 1 screw.
(BBZ30P060FTB)
② Disconnect the BtoB connector and then remove the USBA Assy.
(CN3001)

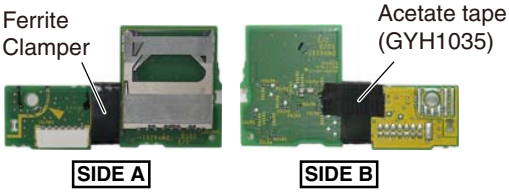



③ Remove the 1 screw and then remove the SD earth spring.
(BPZ30P080FNI)
④ Remove the 3 screws.
(BBZ30P060FTB)
⑤ Disconnect the BtoB connector and then remove the SDCB Assy with the Stay.
(CN2801)




## ■ Notes on disassembly

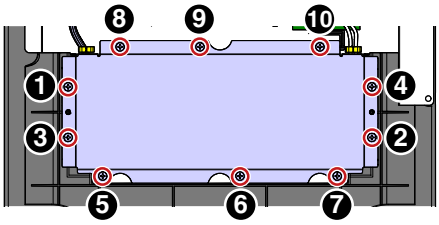
If SDCB Assy is replaced, fix Ferrite Clamper with acetate tape as shown below.

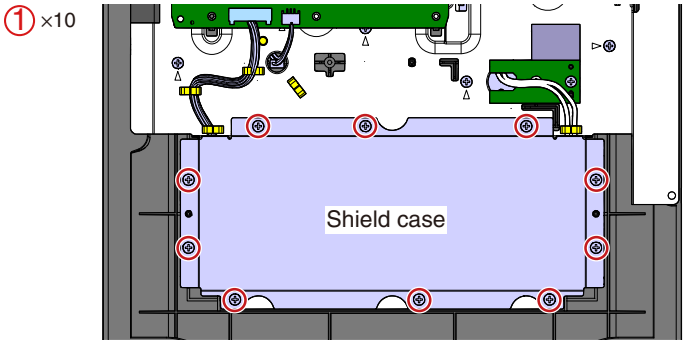


### [2-4] SW POWER SUPPLY

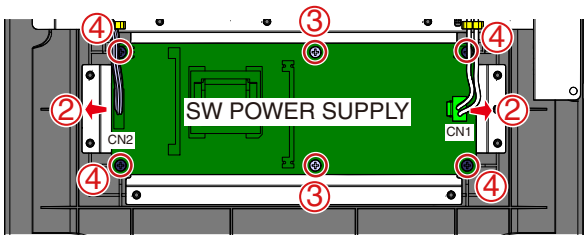
① Remove the 10 screws and then remove the Shield case.
(BPZ30P080FNI)

**Screw tightening order**



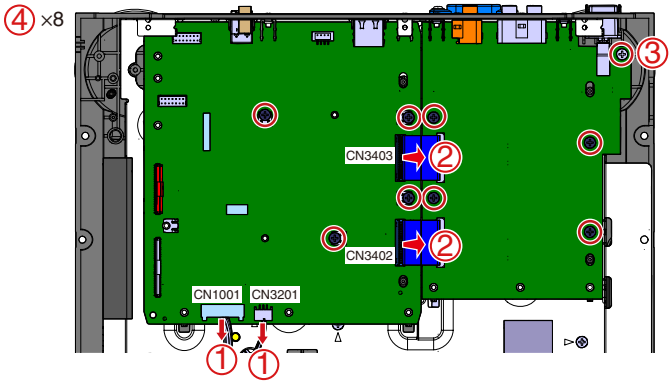




② Disconnect the 2 connectors.
(CN1, 2)
③ Remove the 2 screws.
(BPZ30P080FNI)
④ Remove the 4 screws and then remove the SW POWER SUPPLY.
(BBZ30P060FTB)

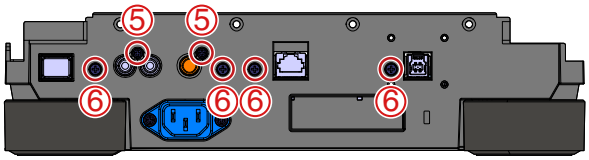



### [2-5] MAIN and AUDB Assemblies

① Disconnect the 2 connectors.
(CN1001, 3201)
② Disconnect the 2 bridge connectors.
(CN3402, 3403)
③ Remove the 1 screw.
(BPZ30P080FNI)
④ Remove the 8 screws.
(BBZ30P060FTB)

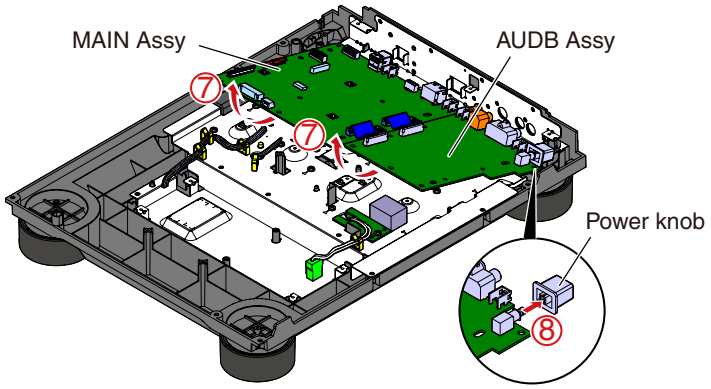



⑤ Remove the 2 screws.
(PPZ30P080FTB)
⑥ Remove the 4 screws.
(BBZ30P060FTB)



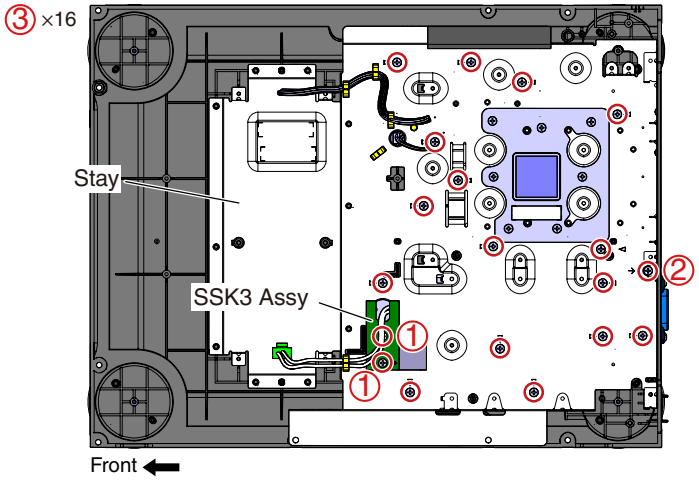
• Rear view

⑦ Remove it while pulling out the MAIN and AUDB Assys toward you.
⑧ Remove the Power knob.

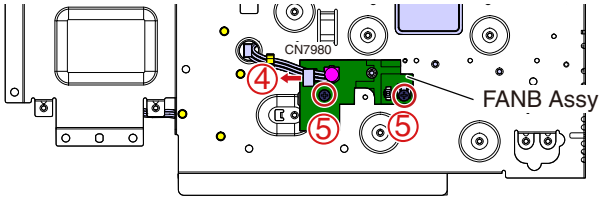



**[2-6] FANB Assy**

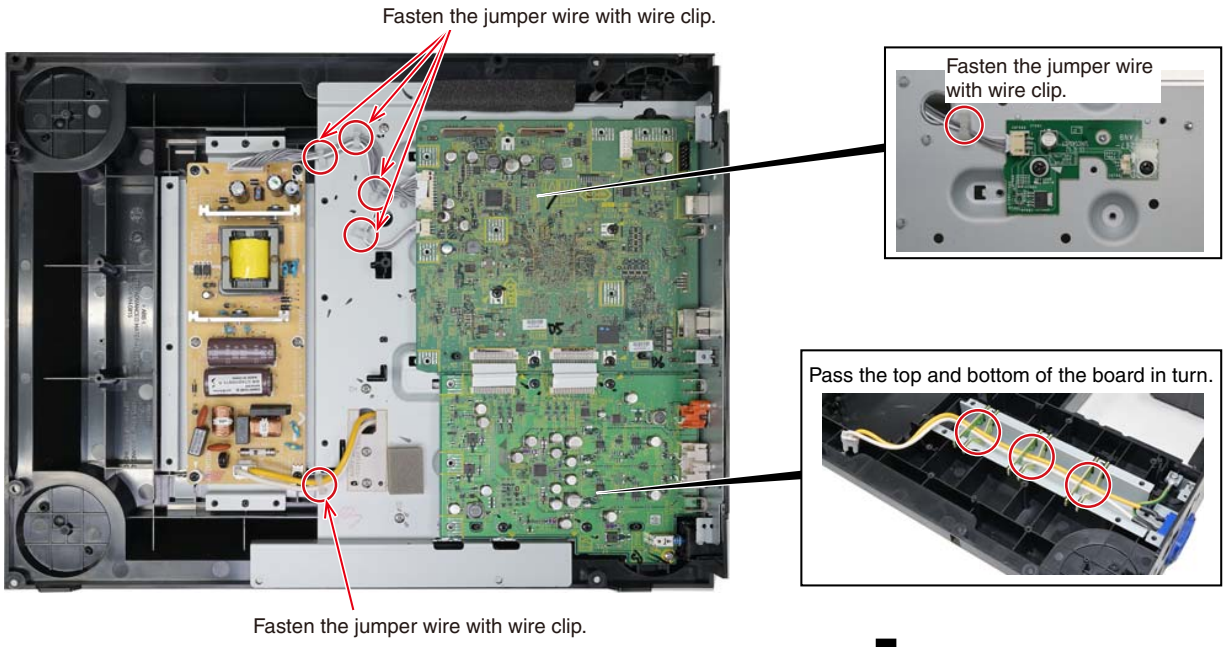
① Remove the 2 screws and then remove the SSK3 Assy.
(BPZ30P080FNI)
② Remove the 1 screw.
(BBZ30P080FTC)
③ Remove the 16 screws and then remove the Stay.
(BPZ30P080FNI)




④ Disconnect the 1 connector.
(CN7980)
⑤ Remove the 2 screws and then remove the FANB Assy.
(BPZ30P080FNI)



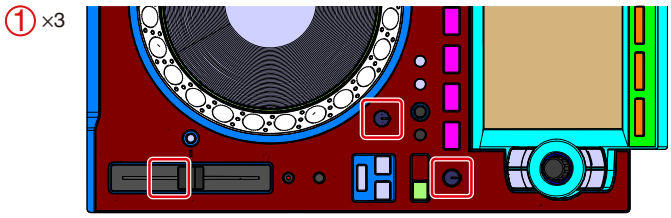
## ■ Jumper wires styling


Fasten the jumper wire with wire clip.
Fasten the jumper wire with wire clip.
Pass the top and bottom of the board in turn.
Fasten the jumper wire with wire clip.

## [3] Control panel Section

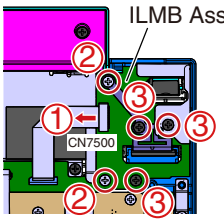
### [3-1] Knobs

① Remove the all knobs.

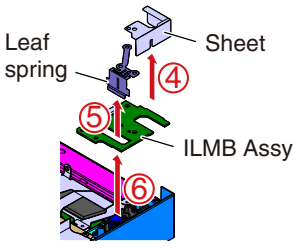



### [3-2] ILMB Assy

① Disconnect the 1 FFC. (CN7500)
② Remove the 2 screws. (BBZ30P080FTC)
③ Remove the 3 screws. (BPZ30P100FTB)
④ Remove the Sheet.
⑤ Remove the Leaf spring.
⑥ Remove the ILMB Assy.

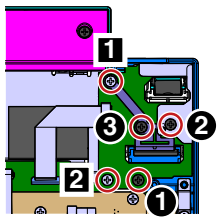



• Bottom view




• Bottom view

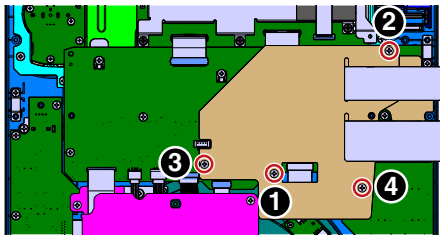
**Screw tightening order**

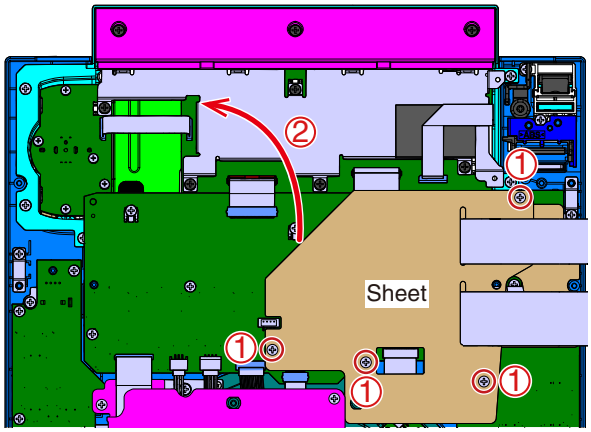


## [3-2] Barrier

① Remove the 4 screws.
(BPZ30P080FNI)
② Open the Sheet direction arrow.

**Screw tightening order**



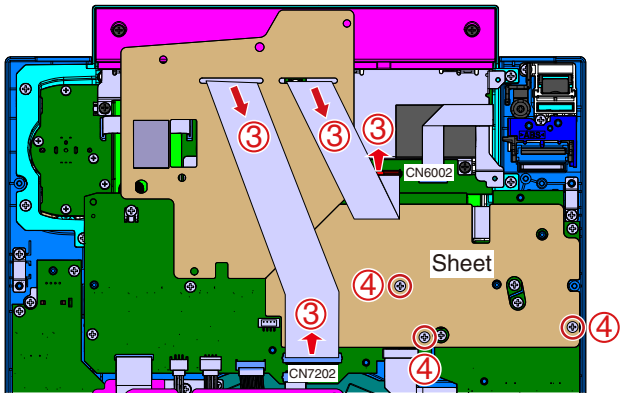




• Bottom view

③ Disconnect the 2 FFCs.
(CN6002, 7202)

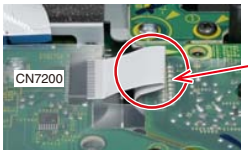
**Caution:**
The locking function of the connectors of CN6002, 7202 is fragile. Therefore, when locking or unlocking, it is necessary to work so that the force equally applies to both sides with both hands.
Also, we need to be careful not to overpower.

④ Remove the 3 screws and then remove the Sheet.
(BPZ30P080FNI)



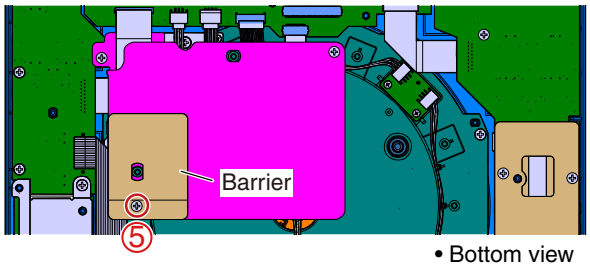

• Bottom view

### ■ FFC styling



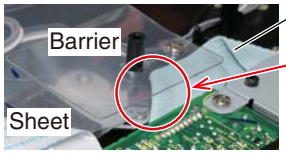

FFC placed on the Sheet

⑤ Remove the 1 screw and then remove the Barrier.
(BPZ30P080FNI)




• Bottom view

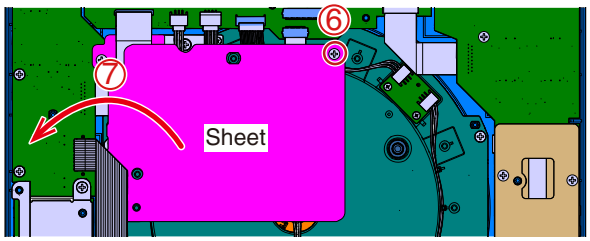
### ■ Jumper wires styling




Flat cable jumper

Flat cable jumper is placed between the barrier and the sheet.

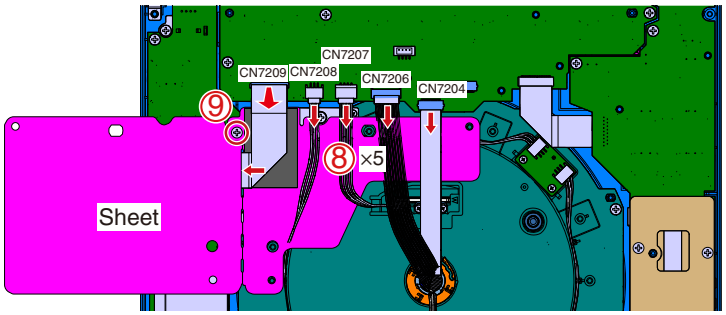
⑥ Remove the 1 screw.
(BPZ30P080FNI)
⑦ Open the Sheet direction arrow.




• Bottom view

⑧ Disconnect the 2 FFCs and 3 connectors.
(CN7204, 7206-7209)
**Caution:**
The locking function of the connectors of CN7204 is fragile. Therefore, when locking or unlocking, it is necessary to work so that the force equally applies to both sides with both hands.
Also, we need to be careful not to overpower.

⑨ Remove the 1 screw and then remove the Sheet.
(BPZ30P080FNI)

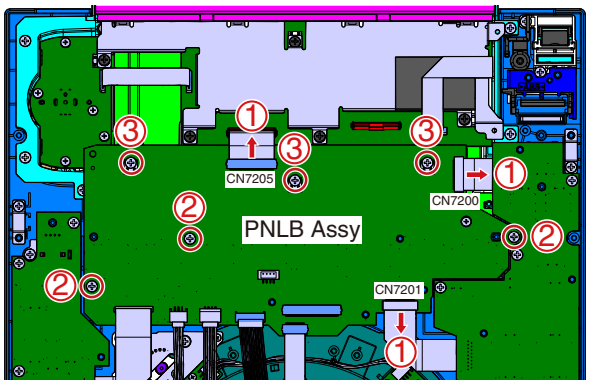


• Bottom view

**[3-3] PNLB Assy**

① Disconnect the 3 FFCs.
(CN7200, 7201, 7205)
**Caution:**
The locking function of the connectors of CN7205 is fragile. Therefore, when locking or unlocking, it is necessary to work so that the force equally applies to both sides with both hands.
Also, we need to be careful not to overpower.

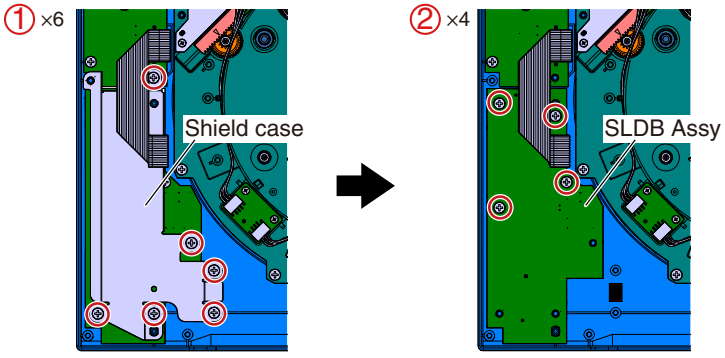
② Remove the 3 screws.
(BPZ30P080FNI)
③ Remove the 3 screws and then remove the PNLB Assy.
(BBZ30P080FTC)



• Bottom view

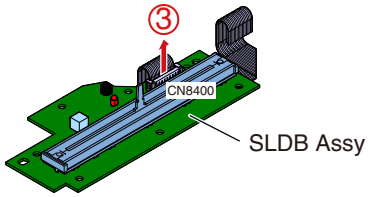
**[3-4] SLDB Assy**

① Remove the 6 screws and then remove the Shield case.
(BPZ30P080FNI)
② Remove the 4 screws and then remove the SLDB Assy.
(BPZ30P080FNI)



• Bottom view
• Bottom view

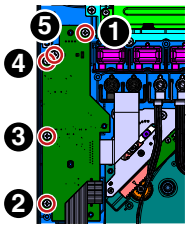
③ Disconnect the 1 connector.
(CN8400)

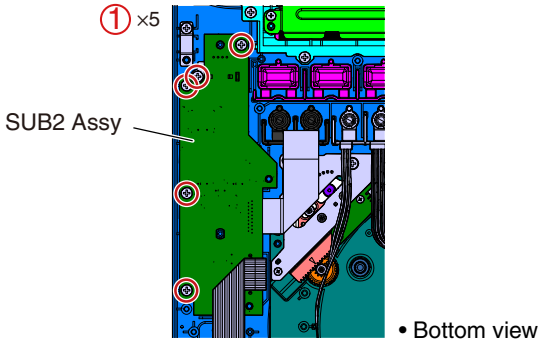


### [3-5] SUB2 Assy

① Remove the 5 screws and then remove the SUB2 Assy.
(BPZ30P080FNI)

**Screw tightening order**

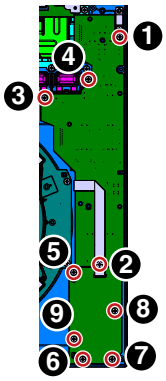


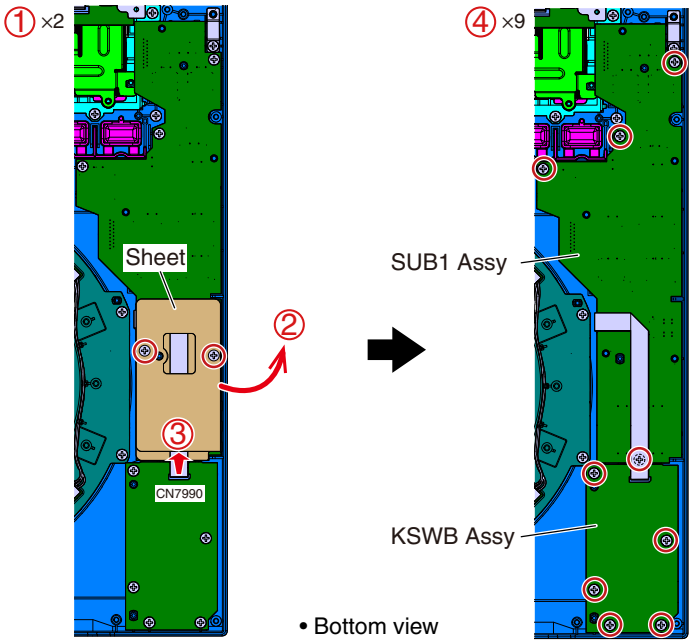




### [3-6] SUB1 and KSWB Assemblies

① Remove the 2 screws.
(BPZ30P080FNI)
② Remove the Sheet direction arrow.
③ Disconnect the 1 FFC.
(CN7990)
④ Remove the 9 screws and then remove the SUB1 and KSWB Assemblies.
(BPZ30P080FNI)

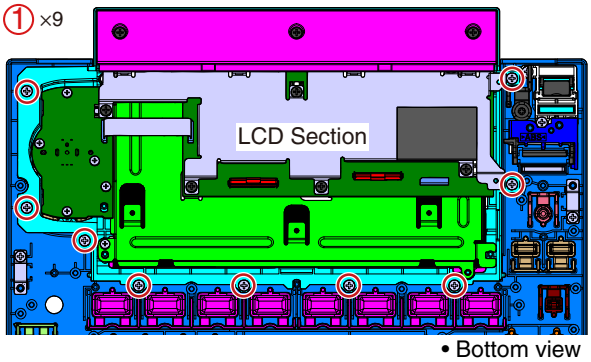
**Screw tightening order**




### [3-7] LCD Section

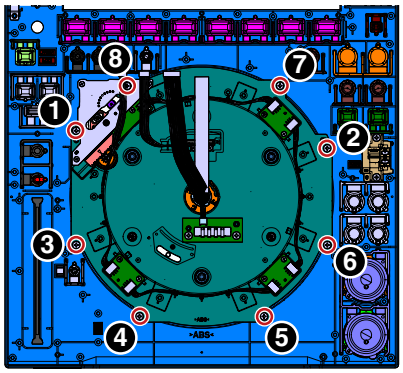
① Remove the 9 screws and then remove the LCD Section.
(BPZ30P080FNI)

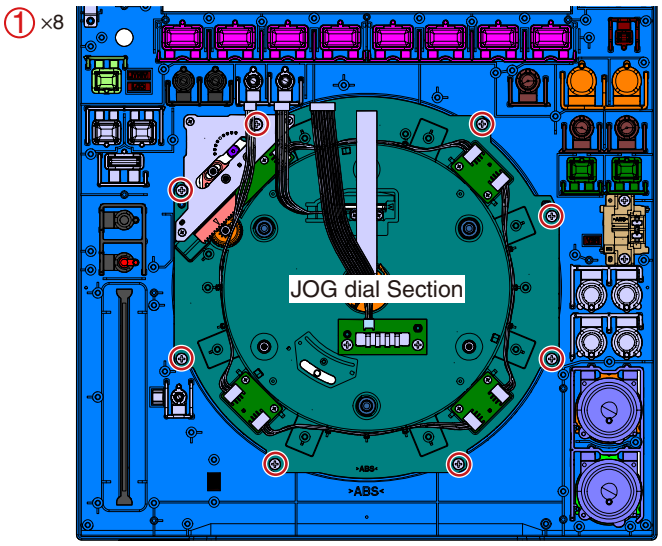


### [3-8] JOG dial Section

① Remove the 8 screws and then remove the JOG dial Section.
(BPZ30P080FNI)

**Screw tightening order**



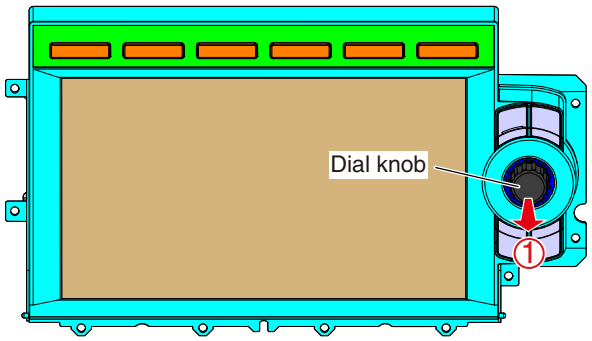




• Bottom view

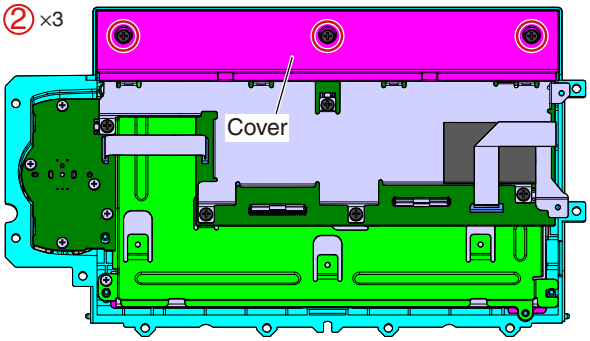
## [4] LCD Section

### [4-1] Exterior parts

① Remove the Dial knob.

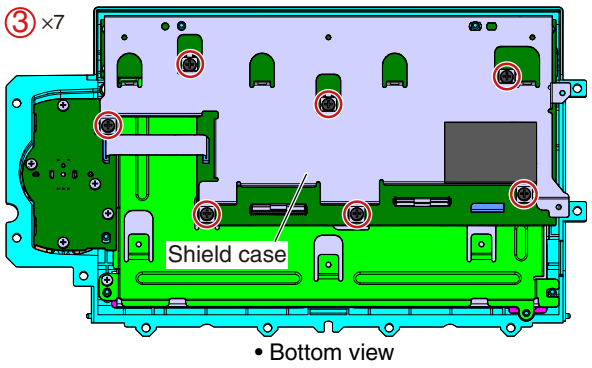



② Remove the 3 screws and then remove the Cover.
(BBZ30P060FTB)




• Bottom view

③ Remove the 7 screws and then remove the Shield case.
(BBZ30P060FTB)



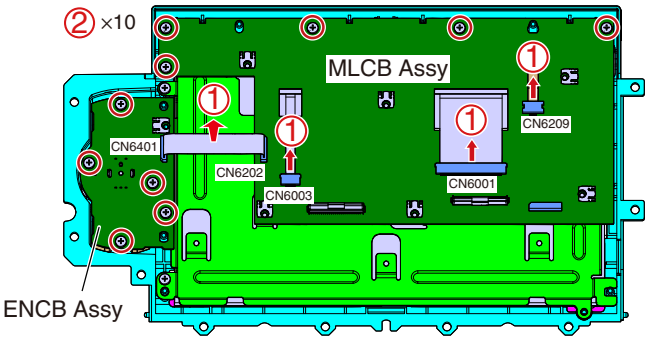

• Bottom view

**[4-2] MLCB and ENCB Assemblies**

① Disconnect the 4 FFCs.
(CN6001, 6003, 6202, 6209)

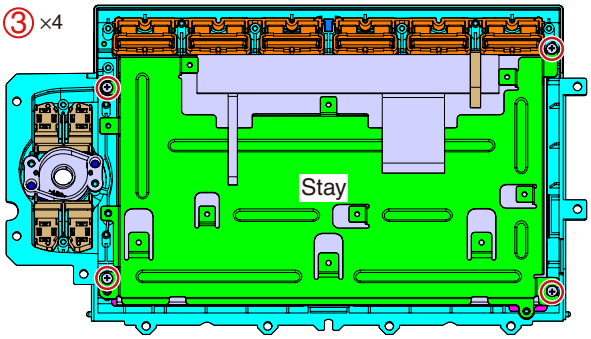
**Caution:**
The locking function of the connectors of CN6001 is fragile. Therefore, when locking or unlocking, it is necessary to work so that the force equally applies to both sides with both hands.
Also, we need to be careful not to overpower.

② Remove the 10 screws and then remove the MLCB and ENCB Assemblies.
(BPZ26P080FTC)




• Bottom view

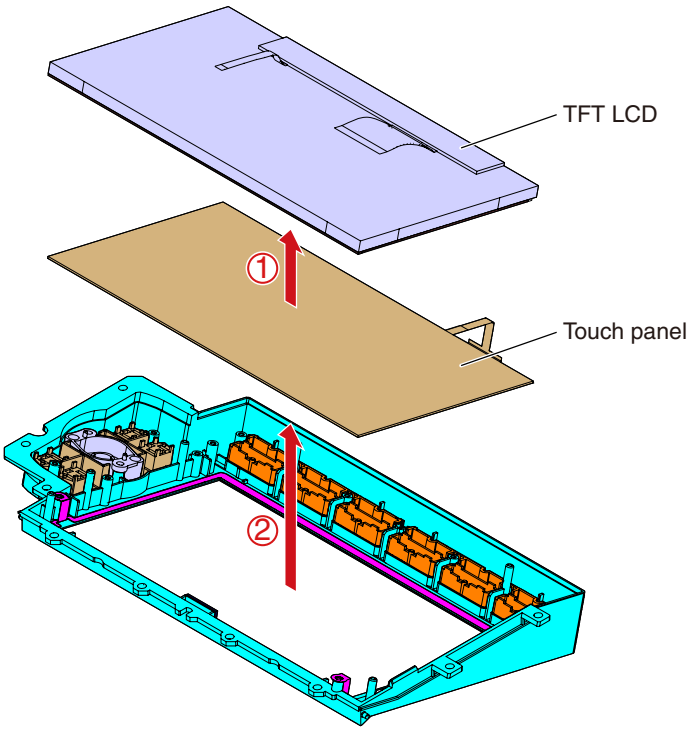
③ Remove the 4 screws and then remove the Stay.
(BPZ26P080FTC)




• Bottom view

**[4-3] TFT LCD and Touch panel**

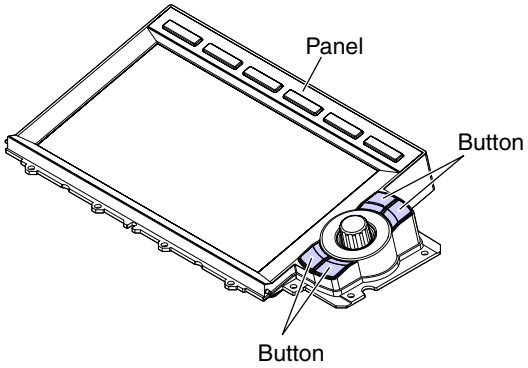
① Remove the TFT LCD.
② Remove the Touch panel.

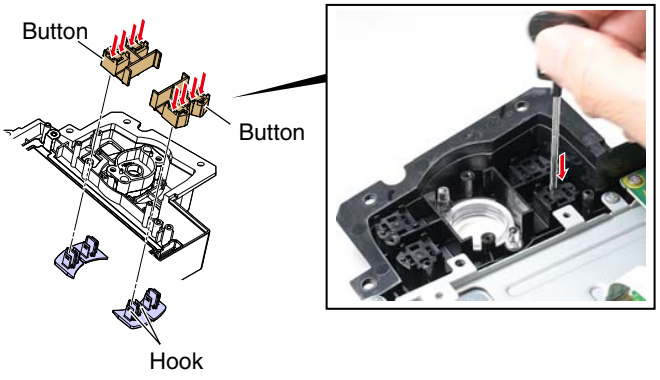



• Bottom view

## ■ Notes on disassembling buttons

As shown below, 4 buttons on the panel are fixed 2 buttons from the bottom side.
(A button has 2 hooks.)
When disassembling it, put off the hook by using an thin rod or the like.
In addition, the hook is fragile so please be careful.



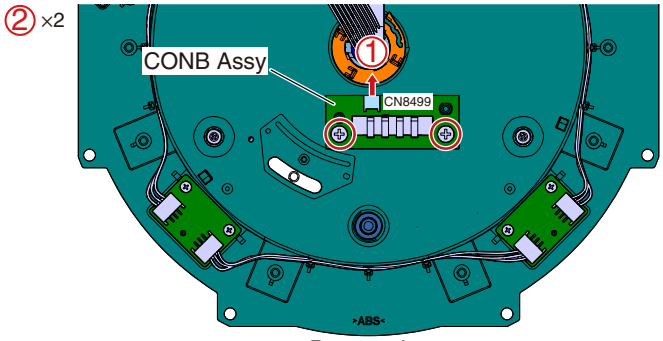

• Bottom view

## [5] JOG dial Section

### [5-1] CONB Assy

① Disconnect the 1 connector. (CN8499)
② Remove the 2 screws and then remove the CONB Assy. (BPZ30P080FNI)

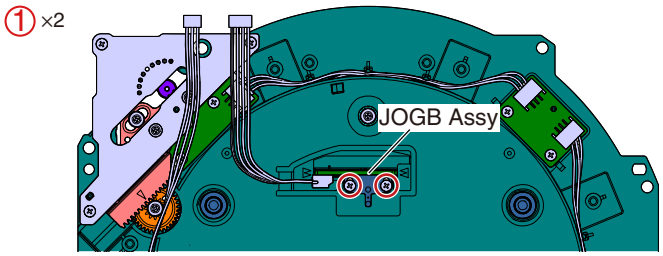
**Caution:**
Do not place CONB Assy downward because Earth spring of CONB Assy will be deformed.




• Bottom view

### [5-2] JOGB Assy

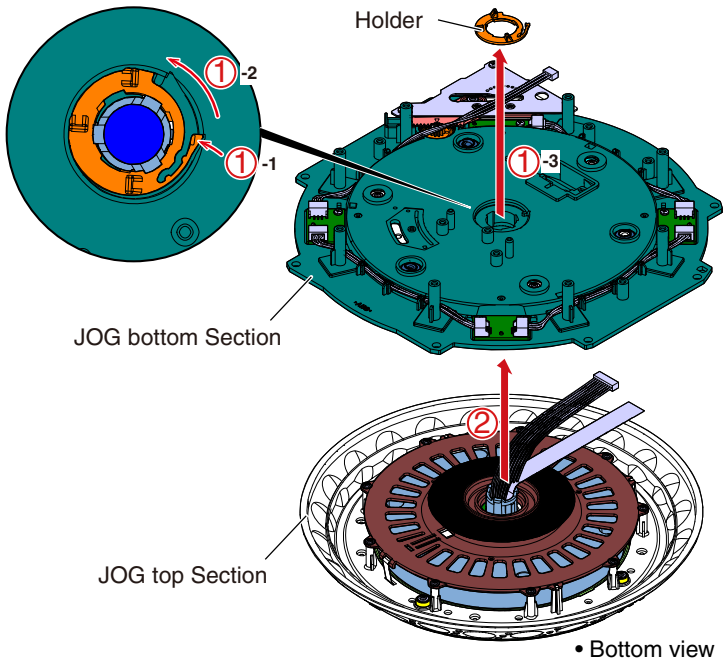
① Remove the 2 screws and then remove the JOGB Assy. (BPZ20P060FTC)




• Bottom view

### [5-3] Each JOG Section

① Unhook the hook and then remove it while turn the Holder counterclockwise direction.
② Divide into the JOG top Section and JOG bottom Section.



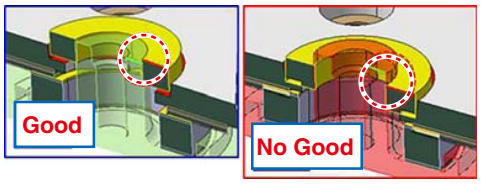

• Bottom view

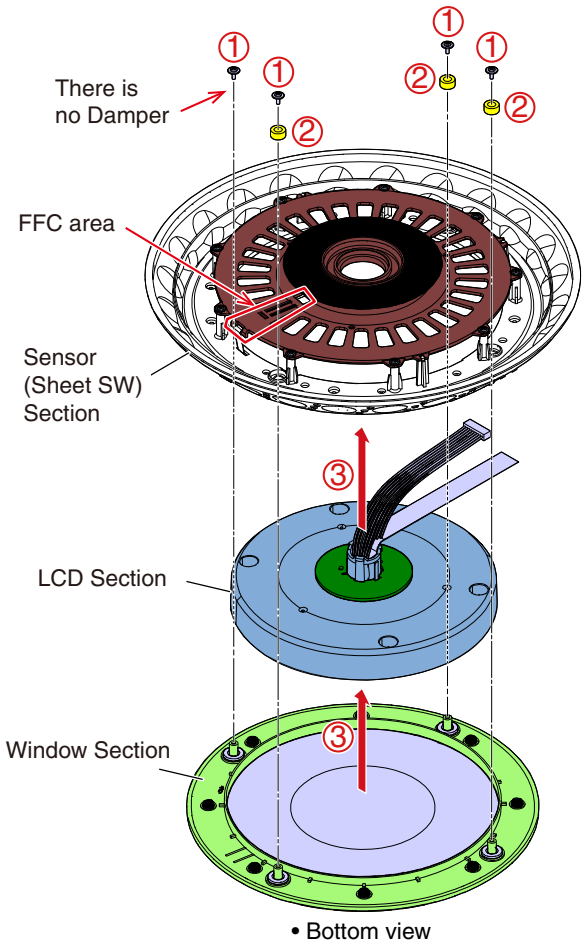
### [5-4] JOG top Section

① Remove the 4 screws.
(DBA1265)
② Remove the 3 Dampers.
③ Divide into the Window Section, LCD Section, and Sensor (Sheet SW) Section.

### ■ Notes on disassembly

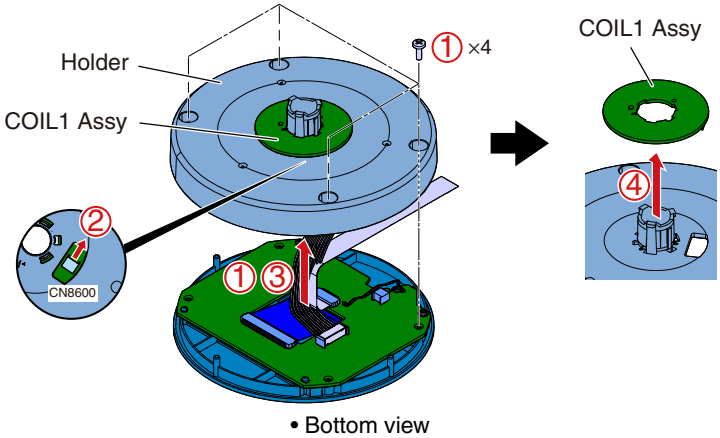
When installing the dumper, the ribs on the base should not protrude.




### [5-5] COIL1 Assy

① Remove the 4 screws and then remove the some Holder.
(BPZ30P080FNI)
② Disconnect the 1 connector.
(CN8600)
③ Completely remove the Holder.
④ Remove the COIL1 Assy.

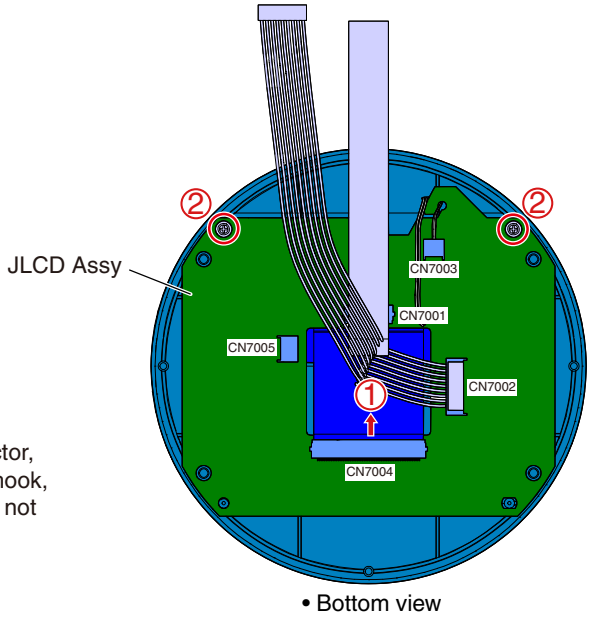


## [5-6] JLCD Assy and LCD Service Assy

① Disconnect the 1 FPC.
(CN7004)

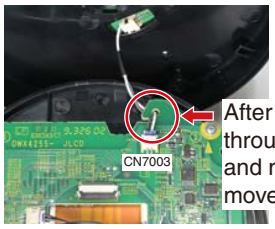
**Caution:**
The locking function of the connectors of CN7001, 7004 is fragile. Therefore, when locking or unlocking, it is necessary to work so that the force equally applies to both sides with both hands.
Also, we need to be careful not to overpower.

② Remove the 2 screws.
(IPZ20P060FTC)



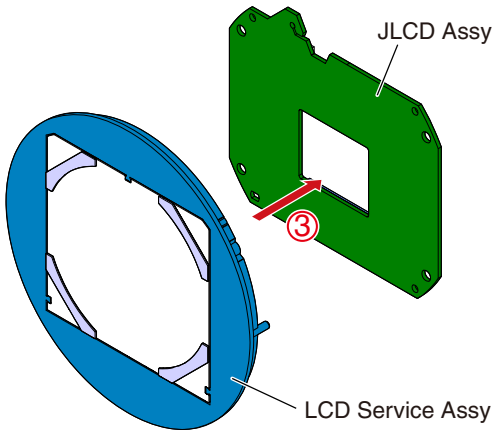
• Bottom view

### ■ Jumper wires styling



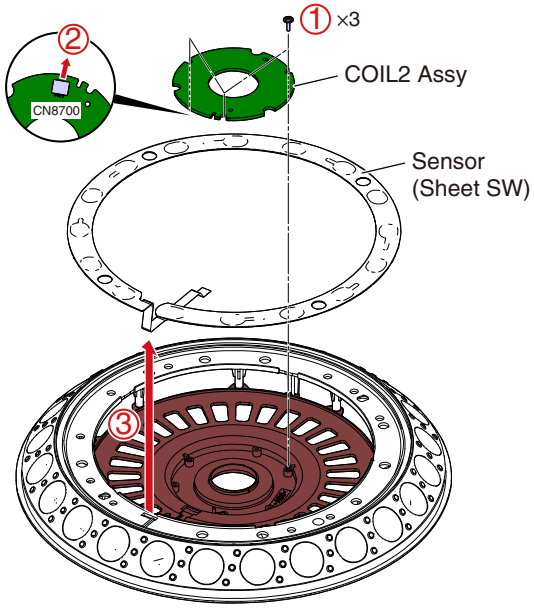
After connecting to the connector, through the wire to the board hook, and make that the wiring does not move in the product.

③ Divide into the JLCD Assy and LCD Service Assy.



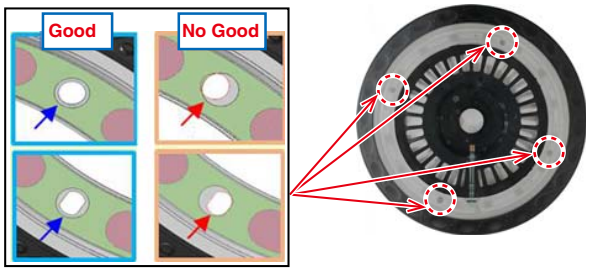
### [5-7] COIL2 Assy and Sensor (Sheet SW)

① Remove the 3 screws and then remove the COIL2 Assy.
(IPZ20P060FTC)
② Disconnect the 1 connector.
(CN8700)
③ Remove the Sensor (Sheet SW).

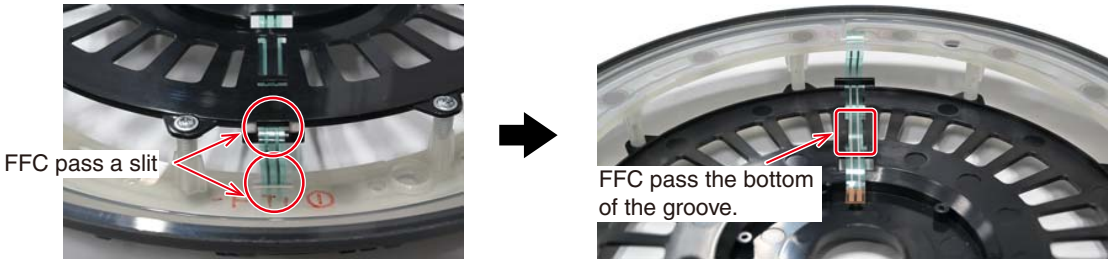



### ■ The installation position of Sensor (Sheet SW)

Install it so that the holes in Jog Dial and Sensor (Sheet SW) are aligned.

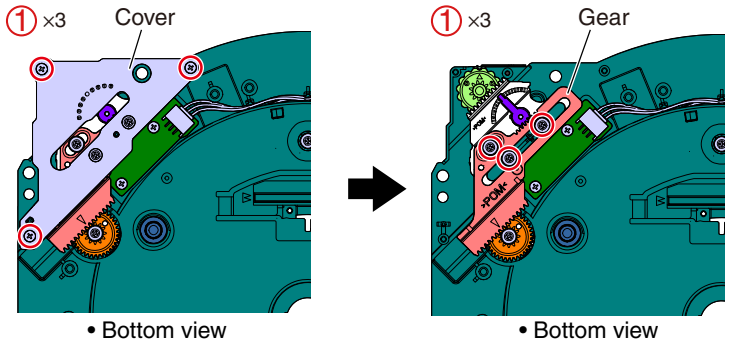



### ■ Sensor (Sheet SW) styling

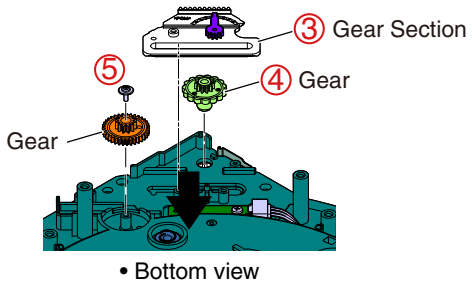



### [5-8] Gear Section

① Remove the 3 screws and then remove the Cover.
(BPZ20P060FTC)
② Remove the 3 screws and then remove the Gear.
(DBA1265)

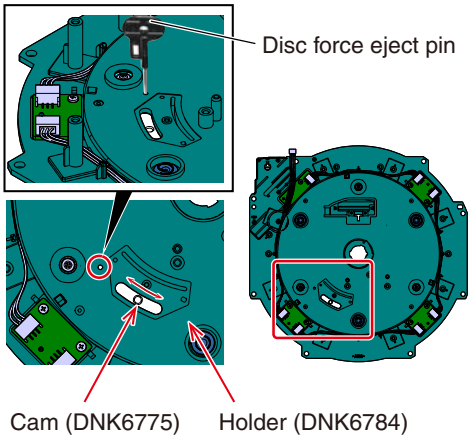


③ Remove the Gear Section.
④ Remove the Gear.
⑤ Remove the 1 screw and then remove the Gear.
(DBA1265)

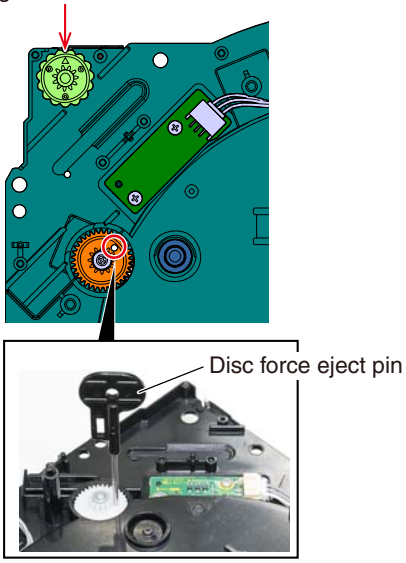



## ■ The procedure for positioning the gear

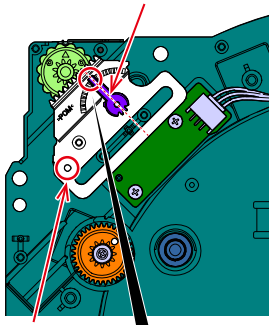
Adjust the positioning holes of Cam (DNK6775) and Holder (DNK6784).



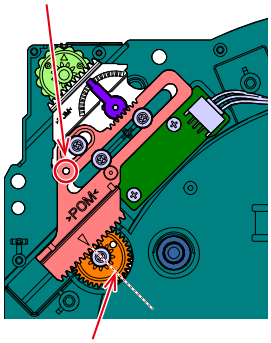

Align to "△" mark.




Align to the center of the scale.




Positioning hole

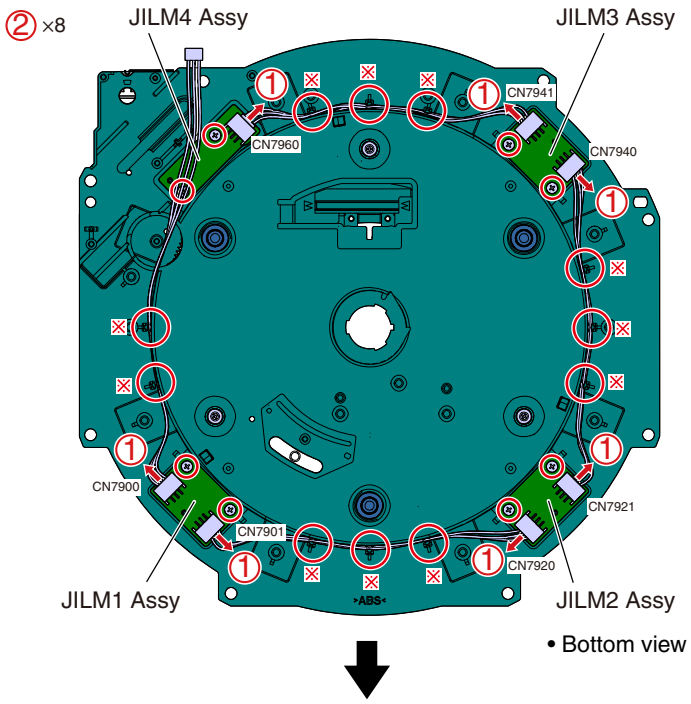


Align "△" mark to the center of the gear.

### [5-9] JILM1 to 4 Assemblies

① Disconnect the all connectors.
(CN7900, 7901, 7920, 7921, 7940, 7941, 7960)
② Remove the 8 screws and then remove the JILM1 to 4 Assemblies.
(BPZ20P060FTC)

※ Put in the jumper wire to the slit, and secure it at the reassembling.

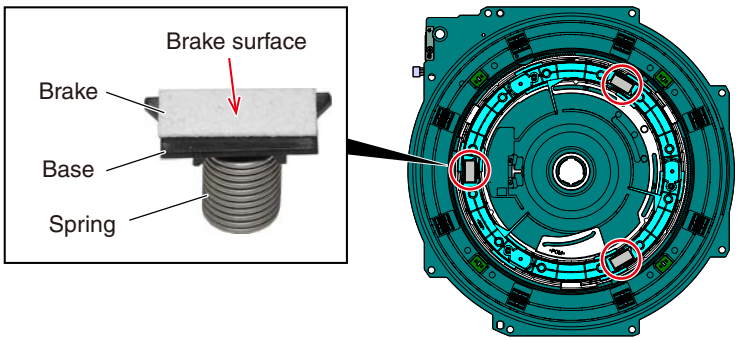



## ■ About the roller

The part to which the rollers are attached has been changed from the slit type to the hole type.
When removing or reassembling, be careful not to damage that part.
If the pliers are modified and worked on as shown below, they are easy to disassemble or reassemble.

## ■ About the brake

Be careful of the slowdown due to the Brake removal.
Confirm that the Brake is properly applied, that there is no lifting, and that the brake surface is clean.
Clean the brake surface as necessary.

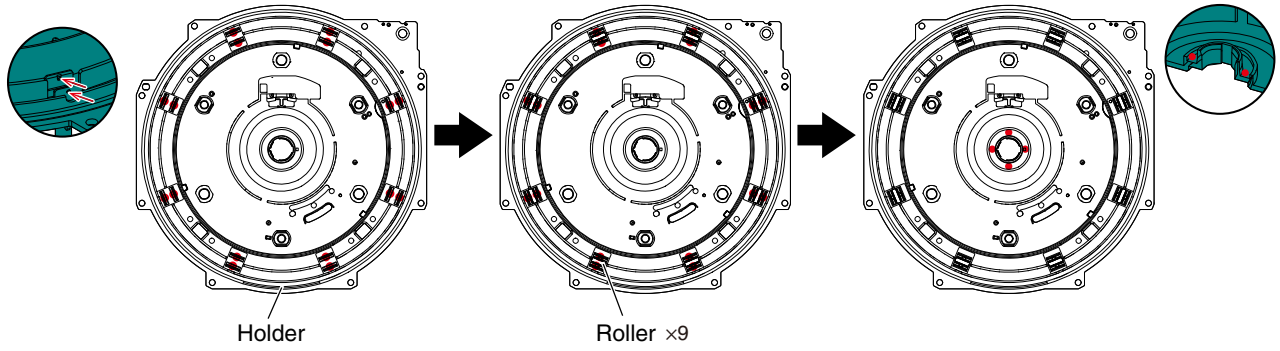


## Locations of grease application

### [Jog dial Section]

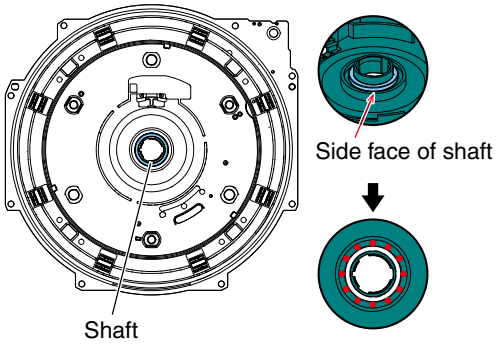
• Holder

Lubricating oil (GYA1001)




• Shaft

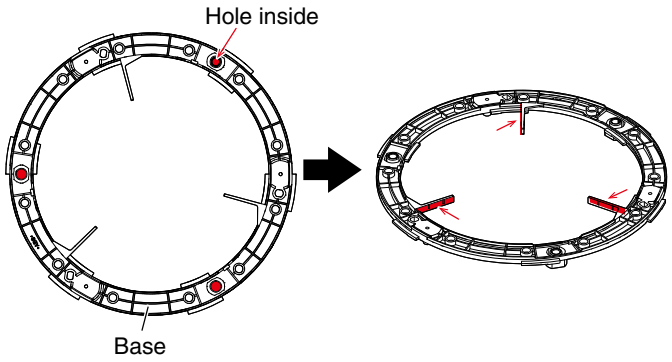
Lubricating oil (GYA1001)




• Base

Lubricating oil (GEM1104)

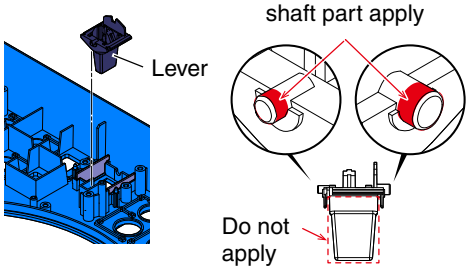
Lubricating oil (GEM1038)




### [Control panel Section]

• Lever

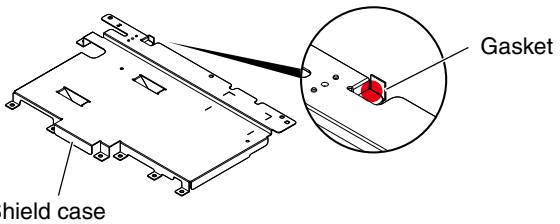
Lubricating oil (GEM1104)




### [Chassis Section]

• Shield case

Bond (GYA1011)



# 8. EACH SETTING AND ADJUSTMENT
## 8.1 NECESSARY ITEMS TO BE NOTED

After repairing, be sure to check the version of the firmware, and if it is not the latest one, update to the latest version.
Perform the each item when the following parts are replaced.

| | |
|---|---|
| • PCB Assy (IC) storing firmware and utility settings<br>MAIN Assy (FLASH (eMMC): IC2802*NSP) | ➡ • Confirmation of the version of the firmware<br>• Updating to the latest version of the firmware<br>(8.2 UPDATING OF THE FIRMWARE)<br>• JOG LCD calibration<br>(6.2 JOG LCD CALIBRATION)<br>• Service mode_Fan operation check<br>(6.1 SERVICE MODE_[Mode 7/10] FAN OPERATION CHECK PAGE)<br>• Service mode_Thermometer check<br>(6.1 SERVICE MODE_[Mode 8/10] THERMOMETER CHECK PAGE)<br>• Writing the serial number of the unit<br>(8.3 WRITING THE SERIAL NUMBER OF THE UNIT) |
| • PCB Assy (IC) storing firmware<br>PNLB Assy (PANEL CPU: IC7202) | ➡ • Confirmation of the version of the firmware<br>• Updating to the latest version of the firmware<br>(8.2 UPDATING OF THE FIRMWARE) |
| • JOG dial section component part | ➡ • Confirmation of the specified value by JOG dial Rotation Time measurement mode<br>When measuring, connect JOG dial and the product with 4P extension cable.<br>After the product is reassembled, the JOG dial load measurement is performed again to confirm that there are no problems.<br>(8.4 JOG DIAL ROTATION LOAD ADJUSTMENT) |
| • JOGB Assy | ➡ • Confirmation that contains scale in slit of Photointerrupter after the JOGB Assy is reassembled<br>Service mode_JOG ROTATION FWD/REV check<br>(6.1 SERVICE MODE_[Mode 4/10] CHECK MODE OF OPERATORS) |
| • JOG LCD Service Assy<br>(It is performed when the JOG LCD is disassembled or reassembled, whether or not JOG LCD has been replaced.) | ➡ • JOG LCD calibration<br>(6.2 JOG LCD CALIBRATION) |
| • Fan motor | ➡ • Service mode_Fan operation check<br>(6.1 SERVICE MODE_[Mode 7/10] FAN OPERATION CHECK PAGE)<br>• Service mode_Thermometer check<br>(6.1 SERVICE MODE_[Mode 8/10] THERMOMETER CHECK PAGE) |
| • FANB Assy | ➡ • Service mode_Fan operation check<br>(6.1 SERVICE MODE_[Mode 7/10] FAN OPERATION CHECK PAGE)<br>• Service mode_Thermometer check<br>(6.1 SERVICE MODE_[Mode 8/10] THERMOMETER CHECK PAGE) |
| • Tempo slider VR: VR8400 | ➡ • TEMPO ZERO POINT ADJUSTMENT<br>(8.5 TEMPO ZERO POINT ADJUSTMENT) |
| • Touch panel | ➡ • Service mode_Confirmation of the Touch panel<br>(6.1 SERVICE MODE_[Mode 5/10] TOUCH PANEL CHECK) |

# 8.2 UPDATING OF THE FIRMWARE

## ■ Downloading and Unzipping the Updater File

① Download the zipped firmware file for the latest firmware.
② Unzip the CDJ3K_v***.zip file to get the updater file.
CDJ3K_v***.UPD

※ The above xxx denotes the version of new firmware.
※ The extension (.upd) may not be displayed, depending on the setting of the computer.

## ■ Preparation for Updating

Save the firmware file [CDJ3K_v***.UPD] to the root directory of USB memory.
※ DO NOT rename the file name.
※ DO NOT save the multiple firmware files in the USB memory.
※ Please use USB memory formatted by FAT/FAT32. It does not correspond to HFS+.

## ■ How to Update

① Enter Update mode.
While holding the LOOP IN/CUE (IN ADJUST) and LOOP RELOOP/EXIT buttons pressed, press the ⏻ button (to set it to ON).
When "Connect USB storage device into top USB port." is displayed, release the button.

② Plug a USB memory device to use for updating into the USB slot.

③ Updating starts.
At the same time, the current version and the updated version are displayed.

※ NEVER unplug the USB memory device nor turn the unit OFF during updating.

④ When "Firmware update is complete. Turn the power off/on before using." is displayed, set the power to off.
After confirming that the firmware has been updated, remove the update USB memory.

Updating is completed.
If updating does not start or "MAIN update file is corrupt." is displayed, the file may be corrupted.
Restart from downloading of an updater.
If updating cannot be started even after the above retry, the USB memory device may be faulty. Retry updating, using another USB memory device.

# 8.3 WRITING THE SERIAL NUMBER OF THE UNIT

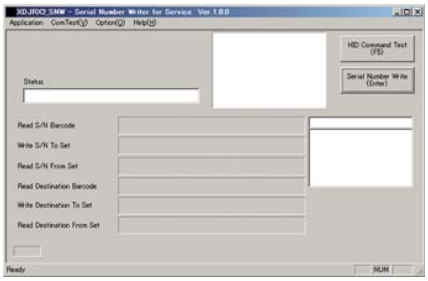
Writing the serial number can be performed from a PC that is connected with this unit via a USB B cable.

Preparations

① Download the software for writing the serial number from Niis.
② The compressed files decompress and save to PC.
The generated folder is below.
- Ini folder
- Log folder
- CDJ3000.SNW.exe
- hidcom.dll

**Procedure**

① Turn on PC, and click “CDJ3000.SNW.exe” in the generated folder. When the software is started, untick “Label print”.

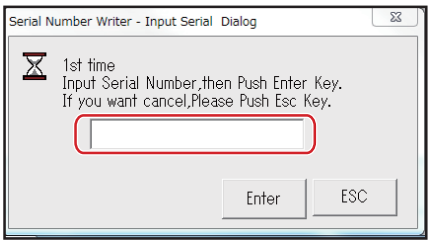


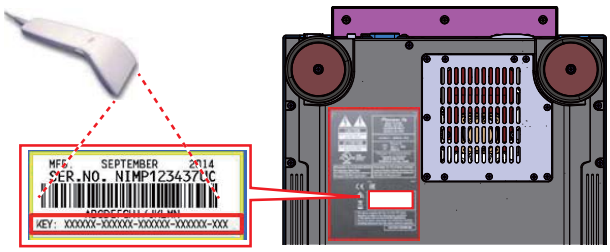
② Connect the unit with a PC via a USB B cable.

③ While holding the TEMPO ±6/±10/±16/WIDE and CUE/LOOP CALL ◄ buttons pressed, press the ⏻ button to turn the unit on.
(Start up the unit in Service mode.)

④ Push [Serial Number Write] button, display serial input dialog (first time).

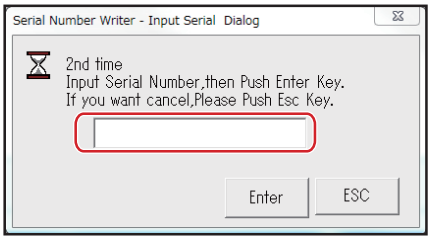
Enter serial number by handwork or barcode reader, and push “Enter”.
If enter by handwork, enter “ ' ” before serial number.
(If forgot, displayed error)
If enter by barcode reader, need to connect for PC in advance.


Serial Number Writer - Input Serial Dialog
1st time
Input Serial Number,then Push Enter Key.
If you want cancel,Please Push Esc Key.
Enter
ESC



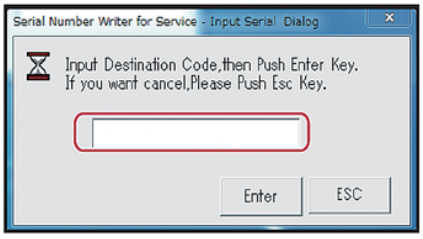

*Reference screen

⑤ Again display serial input dialog (second time), enter serial number by handwork or barcode reader, and push “Enter” like Step ④.


Serial Number Writer - Input Serial Dialog
2nd time
Input Serial Number,then Push Enter Key.
If you want cancel,Please Push Esc Key.
Enter
ESC

⑥ Dialog is displayed for the input of Destination Code, you need to enter in accordance with following table.

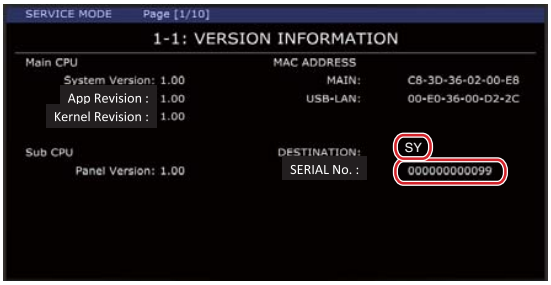
| Model Name | Input Destination Code | DESTINATION |
|---|---|---|
| CDJ-3000/LSYXJ | CDJ-3000/L | SY |
| CDJ-3000/AXJ | CDJ-3000/A | A |
| CDJ-3000/UXJCB | CDJ-3000/U | CU |
| CDJ-3000-W/PXJ | CDJ-3000-W/L | SY |
| CDJ-3000-W/AXJ | CDJ-3000-W/A | A |
| CDJ-3000-W/UXJCB | CDJ-3000-W/U | CU |


Serial Number Writer for Service - Input Serial Dialog
Input Destination Code,then Push Enter Key.
If you want cancel,Please Push Esc Key.
Enter
ESC

⑦ If update is finished correctly, display “OK” after a while.

This is completed about to write serial number for system.
You need to confirm by Service mode about to write correctly.

The unit is already starting in Service mode [Mode 1/10] VERSION INFORMATION. Confirm that "DESTINATION" is "SY" (ex: LSYXJ model) and "SERIAL No" is the same as the serial number of the unit.



# 8.4 JOG DIAL ROTATION LOAD ADJUSTMENT

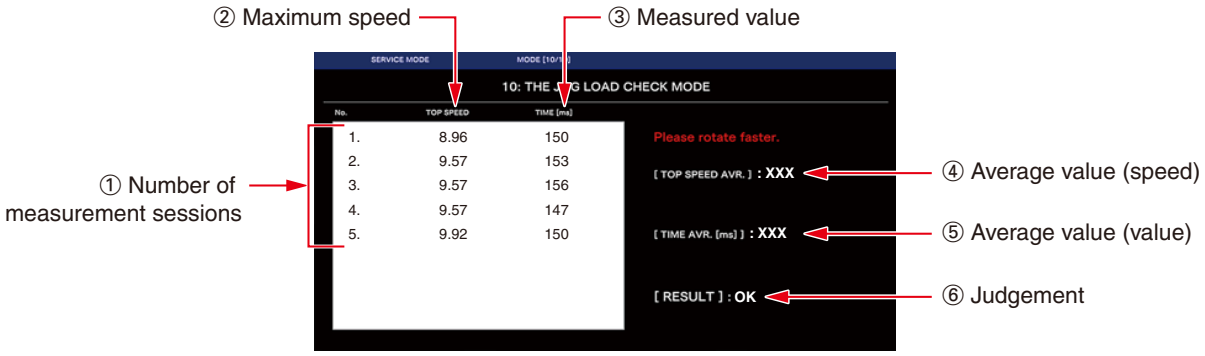
When performing the Jog dial rotation load adjustment, after removing it, connect PNLB Assy and JOGB Assy with 4P extension cable before performing the adjustment.
(Detail is refer to "1.3 SERVICE NOTICE_■ About Jog dial rotation load adjustment".)

## ■ Measurement content

The time required for the JOG dial to decrease its rotation speed from 3 times to 1.5 times normal speed will be measured.
If the maximum speed does not reach 7 times normal speed, measurement will not be performed.

## ■ Indications

① Number of measurement sessions: The accumulated number of measurement sessions from a measurement start will be displayed (1, 2, 3, . . .).
② Maximum speed: The maximum speed in each measurement session will be displayed (unit: × normal).
③ Measured value: The time required for the rotation speed to slow down from 3 times to 1.5 times normal speed ("slowdown time") in each measurement session will be displayed (unit: msec).
④ Average value (speed): The average value of all maximum speed will be displayed (unit: × normal).
⑤ Average value (value): The average value of all measured values will be displayed (unit: msec).
⑥ Judgement: "OK" is displayed if the average value of ⑤ is within the range below.
"NG" is displayed if it is out of the range.
When the number of measurements of ① is 4 times or less, nothing is displayed.




## ■ Procedures

① Set the value of the adjustment value of Cover (Adjust plate) for "0". (Fig. 1)
② Turn the JOG ADJUST knob max at the heavy side and turn the JOG dial 10 times each to clockwise and counter clockwise. After turn the JOG dial, return the JOG ADJUST knob to the center.
※ When JOG dial rotation is not smoothly or abnormal noise occurs, check JOG dial is assembled properly.
③ Enter the mode for JOG dial Rotation Load Adjustment.
While holding the CUE/LOOP CALL ◄ and TEMPO ±6/±10/±16/WIDE buttons pressed, press the ⏻ button to turn the unit on. (Be sure to hold the ⏻ button pressed until the unit starts up.) (Fig. 2)
④ Turn the VINYL SPEED ADJ. TOUCH/BRAKE knob to the maximum (right direction).
⑤ Turn the JOG dial swiftly. Always turn the JOG dial in the left direction.
⑥ The slowdown time (unit: msec) will be measured.
⑦ Perform measurement 5 times. Confirm that a judgment indicated by a display is "OK".
(value of standard: 170 ±20 msec)
⑧ When the rotation decrease time is coming off from spec (NG), adjust it according to "■ Adjustment method".
(Refer to Table 1 for the adjustment value.)
⑨ Turn the JOG ADJUST knob max at the light side and turn the JOG dial swiftly in the left direction.
Perform measurement 1 time. Confirm that a judgment indicated by a display is "OK".
(value of standard: 380 msec or more)

Table 1 Adjustment reference value

| JOG rotation speed (calibration "0") | 221 or more | 220 to 211 | 210 to 201 | 200 to 191 | 190 to 150 | 149 to 145 | 144 to 140 | 139 to 130 | 129 or less |
|---|---|---|---|---|---|---|---|---|---|
| JOG calibration to change (reference) | +4 | +3 | +2 | +1 | 0 | -1 | -2 | -3 | -4 |

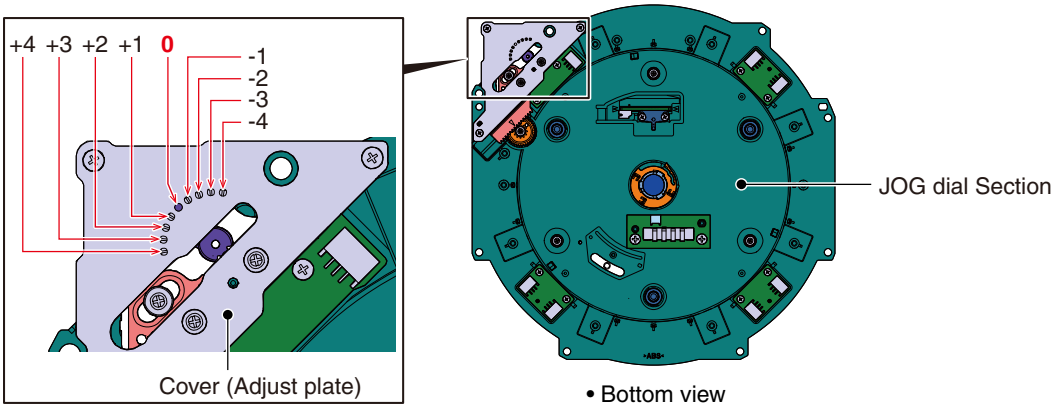



Fig. 1

Fig. 2

## ■ Adjustment method

① Set JOG ADJUST knob for the center.
② Loosen the three screws fixing the Adjust cover.
Remove the one screw fixing Rack gear. (Fig. 3)
③ While holding the JOG ADJUST knob of the center direction; move the Rack gear, and adjust calibration value. (Fig. 4)
※ When you move a rack gear, be careful not to hold the Cover (Adjust plate) and other gears.
④ Secure rack gear, the Cover (Adjust plate) with the screws. (Fig. 3)

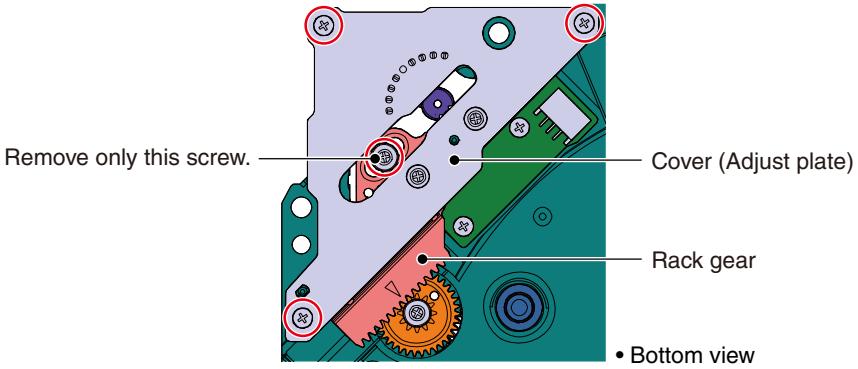
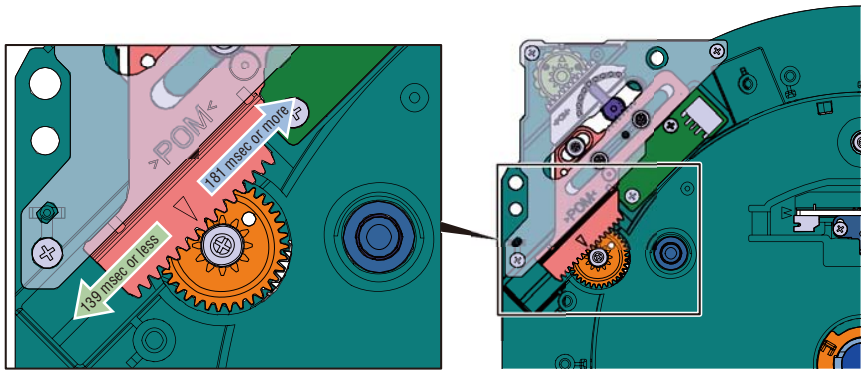



Fig. 3



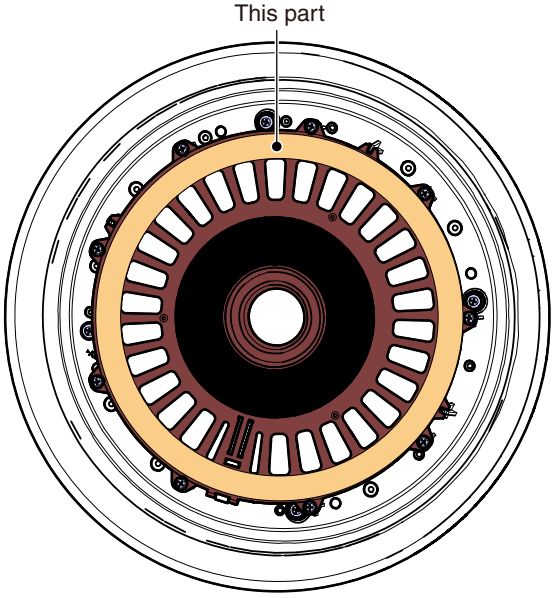

• Bottom view

Fig. 4

## ■ Remarks

If the JOG rotation speed is lower than the specification even if the calibration is minimized, do the following method and perform ③ to ⑦ of "■ Procedures" again.

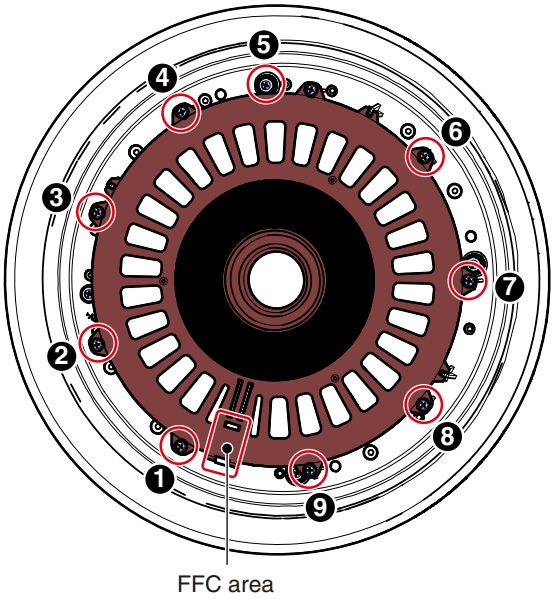
- Wipe the JOG dial (DNK6777) with ethanol again. (Fig. 5)




• Bottom view

Fig. 5

- Reassemble the JOG dial (DNK6777). (Fig. 6)




• Bottom view

Fig. 6

※ Replace the Base (DNK6776) and Spring (DBH1817) if necessary.

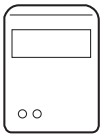
# 8.5 TEMPO ZERO POINT ADJUSTMENT

## ■ Necessary Adjustment Points

| When | Adjustment points |
|---|---|
| Exchange the TEMPO SLIDER VR | VR8401 (ZERO POINT ADJ) |

## ■ Jigs

- ⊖ Precise screwdriver (small)



- Digital multimeter which can be measured to 0.1mV.
- Insulation sheet (The thing that is bigger than PCB)

## ■ Adjustment and Check Points

TEMPO knob
(SLDB Assy)

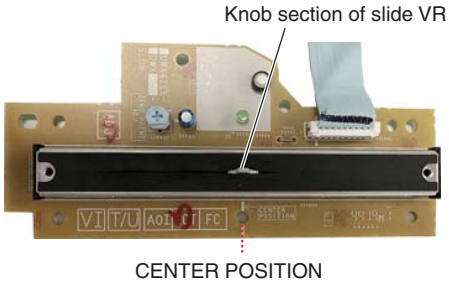
## Zero Point ADJ.

**Notes:**

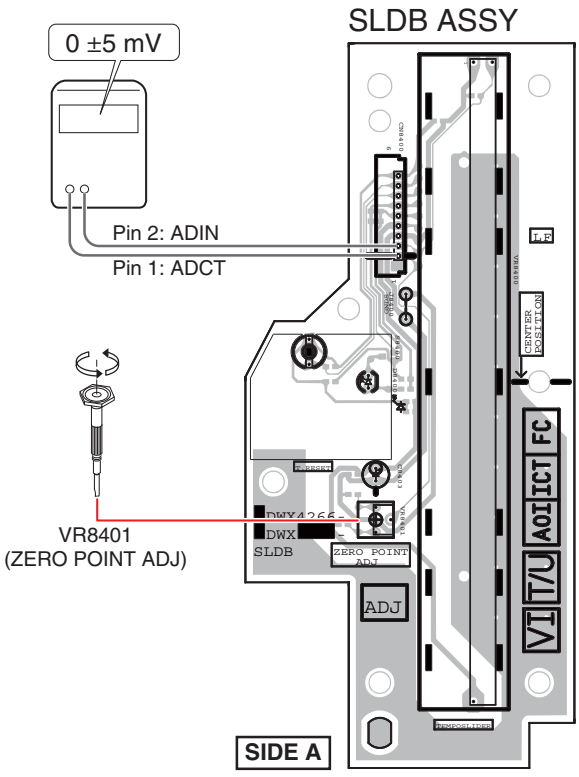
Perform the adjustment before SLDB Assy mounting.
Repeat the adjustment until the voltage becomes 0 ±5 mV.

① Insert the insulation sheet between SLDB Assy and the main unit.

② Match the knob section of slide VR with CENTER POSITION.




③ Adjust it so that turn VR8401, and the voltage of the digital multimeter becomes 0 ±5 mV.



# 8.6 USER SETABLE ITEMS

This unit is provided with user settable items, as shown below.
Although no serious operational problems occur even if data for such user settable items are cleared during repair, it is recommended that you take note of those settings before starting repair.
Use the Check Sheet (next page), to which you can transcribe the settings.

If the corresponding part or board Assy is replaced for repair, change the user resettable settings to those noted on the Check Sheet before starting repair. If resetting is not possible, when returning the repaired product, be sure to tell the customer that the Utility settings have been cleared and will have to be reset, as required.

| Item for user's Setting | Setting Value (The factory default settings are indicated in red letters.) | Part Name | Content to be Stored |
|---|---|---|---|
| **[UTILITY]** | | IC2802 (NSP) (MAIN Assy) | [UTILITY] setting |
| DJ SETTING | | | |
| LOAD LOCK | UNLOCK, LOCK | | |
| QUANTIZE BEAT VALUE | 1/8, 1/4, 1/2, 1 | | |
| BEAT JUMP BEAT VALUE | 1/2, 1, 2, 4, 8, 16, 32, 64 | | |
| HOT CUE AUTO LOAD | OFF, rekordbox SETTING, ON | | |
| HOT CUE COLOR | OFF, ON | | |
| AUTO CUE LEVEL | MEMORY, –78dB, –72dB, –66dB, –60dB, –54dB, –48dB, –42dB, –36dB | | |
| VINYL SPEED ADJUST | TOUCH&RELEASE, TOUCH, RELEASE | | |
| PLAY MODE | CONTINUE, SINGLE | | |
| DISPLAY (LCD) | | | |
| LCD BRIGHTNESS | 1 to 3 to 5 | | |
| JOG LCD BRIGHTNESS | 1 to 3 to 5 | | |
| LANGUAGE | Destination | | |
| SCREEN SAVER | OFF, ON | | |
| TOUCH DISPLAY CALIBRATION | — | | |
| DISPLAY (INDICATOR) | | | |
| SLIP FLASHING | OFF, ON | | |
| ON AIR DISPLAY | OFF, ON | | |
| JOG RING BRIGHTNESS | OFF, 1, 2 | | |
| JOG RING INDICATOR | OFF, ON | | |
| PRO DJ LINK | | | |
| PLAYER No. | AUTO, 1 to 6 | | |
| DUPLICATION | ALL, PLAYER 1 to 6 | | |
| MIDI CHANNEL | 1to 16 | | |
| SYSTEM | | | |
| AUTO STANDBY | OFF, ON | | |
| OUTPUT ATT. | 0dB, –3dB, –6dB, –9dB, –12dB | | |
| HISTORY NAME | Character input | | |
| DEFAULT | — | | |
| INFO | | | |
| VERSION No. | SYSTEM Ver. | | |
| IP ADDRESS | IP ADDRESS | | |
| SERIAL No. | SERIAL NUMBER | | |
| **[Others]** | | | Status of key |
| TIME MODE | TIME, REMAIN | | |
| AUTO CUE | ON, OFF | | |
| JOG MODE | VINYL, CDJ | | |
| TEMPO RANGE | ±6%, ±10%, ±16%, WIDE | | |
| MASTER TEMPO | ON, OFF | | |
| QUANTIZE | ON, OFF | | |
| WAVEFORM/PHASE METER | WAVEFORM, PHASE METER | | ShortCut |

## ■ Procedure for saving and restoring settings

Procedure of [Saving My Settings to a storage device (SD, USB)] and [Calling up My Settings saved on a storage device (SD, USB)] are as follows.

**[Saving My Settings to a storage device (SD, USB)]**

① Connect a storage device (SD, USB) to the unit.
② Press the [SOURCE] button.
③ Select a device.
④ Press the [SHORTCUT] button.
⑤ Touch [SAVE] in [MY SETTINGS].

Press the [SHORTCUT] button again to close the [SHORTCUT] screen.

**[Calling up My Settings saved on a storage device(SD, USB)]**

⑥ Connect a storage device (SD, USB) to the unit.
⑦ Press the [SOURCE] button.
⑧ Select a device.
⑨ Press the [SHORTCUT] button.
⑩ Touch [LOAD] in [MY SETTINGS].

Press the [SHORTCUT] button again to close the [SHORTCUT] screen.

## ■ Sheet for confirmation of the user setting

**[UTILITY]**

| DJ SETTING | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOAD LOCK | | QUANTIZE BEAT VALUE | | | | BEAT JUMP BEAT VALUE | | | | | | | | |
| UNLOCK | LOCK | 1/8 | 1/4 | 1/2 | 1 | 1/2 | 1 | 2 | 4 | 8 | 16 | 32 | 64 | |
| | | | | | | | | | | | | | | |

| HOT CUE AUTO LOAD | | | HOT CUE COLO | | AUTO CUE LEVEL | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OFF | rekordbox SETTING | ON | OFF | ON | MEMORY | –78dB | –72dB | –66dB | –60dB | –54dB | –48dB | –42dB | –36dB |
| | | | | | | | | | | | | | |

| VINYL SPEED ADJUST | | | PLAY MODE | |
|---|---|---|---|---|
| TOUCH&RELEASE | TOUCH | RELEASE | CONTINUE | SINGLE |
| | | | | |

| DISPLAY (LCD) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LCD BRIGHTNESS | | | | | JOG LCD BRIGHTNESS | | | | | LANGUAGE | SCREEN SAVER | |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | | OFF | ON |
| | | | | | | | | | | | | |

| DISPLAY (INDICATOR) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SLIP FLASHING | | ON AIR DISPLAY | | JOG RING BRIGHTNESS | | | JOG RING INDICATOR | |
| OFF | ON | OFF | ON | OFF | 1 | 2 | OFF | ON |
| | | | | | | | | |

| PRO DJ LINK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PLAYER No. | | | | | | | DUPLICATION | | | | | | |
| AUTO | 1 | 2 | 3 | 4 | 5 | 6 | ALL | PLAYER 1 | PLAYER 2 | PLAYER 3 | PLAYER 4 | PLAYER 5 | PLAYER 6 |
| | | | | | | | | | | | | | |

| MIDI CHANNEL | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |

| SYSTEM | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AUTO STANDBY | | OUTPUT ATT. | | | | | HISTORY NAME | DEFAULT |
| OFF | ON | 0dB | –3dB | –6dB | –9dB | –12dB | | |
| | | | | | | | | |

| INFO | | |
|---|---|---|
| VERSION No. | IP ADDRESS | SERIAL No. |
| | | |

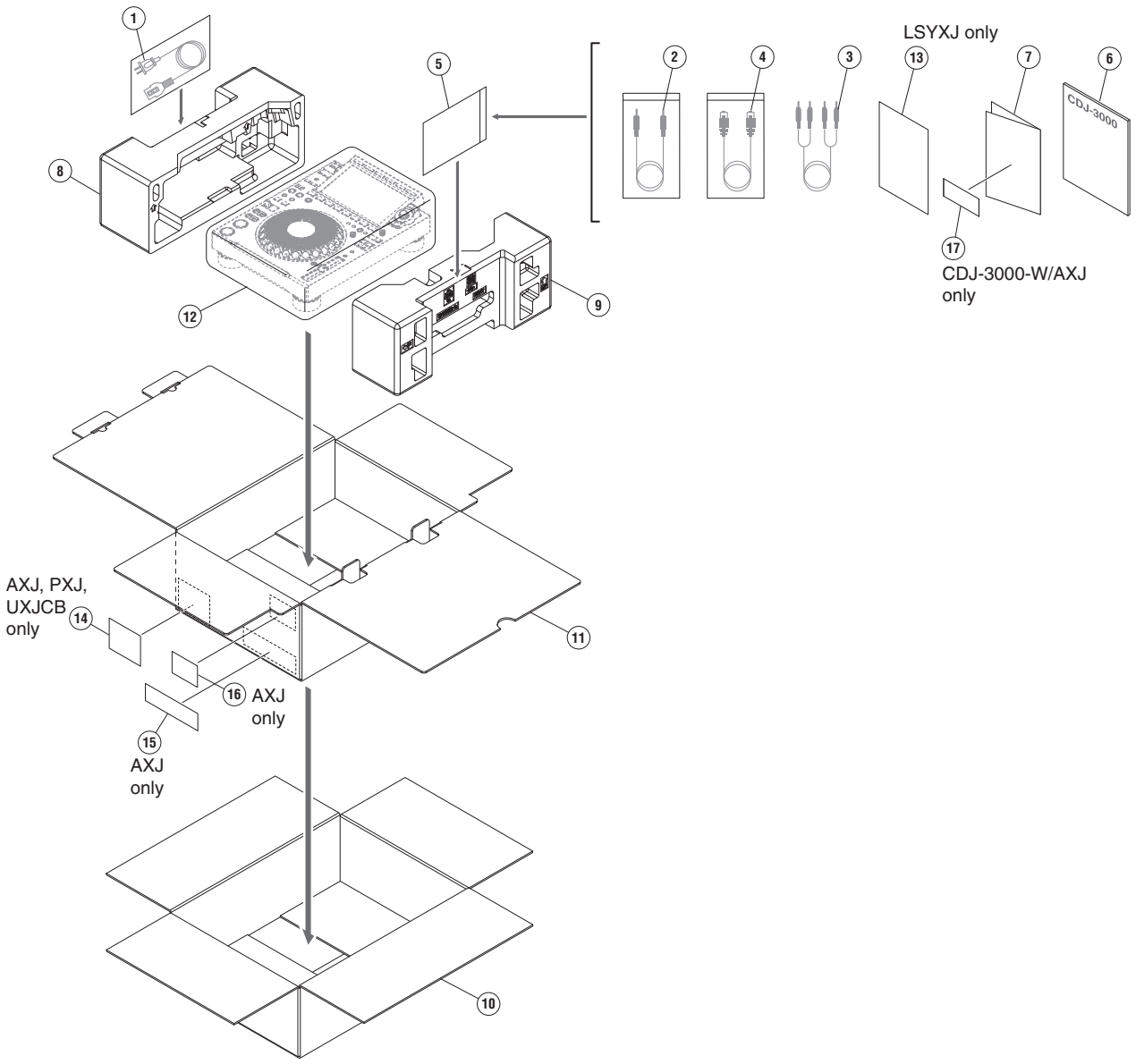
**[Others]**

| TIMER MODE | | AUTO CUE | | JOG MODE | | TEMPO RANGE | | | | MASTER TEMPO | | QUANTIZE | | WAVEFORM/PHASE METER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | REMAIN | ON | OFF | VINYL | CDJ | ±6% | ±10% | ±16% | WIDE | OFF | ON | ON | OFF | WAVEFORM | PHASE METER |
| | | | | | | | | | | | | | | | |

# 9. EXPLODED VIEWS AND PARTS LIST

*NOTES:* ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *Screws adjacent to ▼ mark on product are used for disassembly.*
● *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

## 9.1 PACKING SECTION



## (1) PACKING SECTION PARTS LIST

| Mark | No. | Description | Part No. |
|---|---|---|---|
| ⚠ | 1 | Power cord | See Contrast table (2) |
| | 2 | Digital audio cable | DDE1154 |
| | 3 | Analog audio cable | XDE3045 |
| | 4 | LAN cable | DDE1141 |
| NSP | 5 | Polyethylene Bag | AHG7117 |
| | 6 | Quick Start Guide | DRH1530 |
| | 7 | Precautions for Use | See Contrast table (2) |
| | 8 | Packing Pad | DHA1997 |
| | 9 | Packing Pad | DHA1998 |
| NSP | 10 | Master Carton | See Contrast table (2) |
| | 11 | Packing Case | See Contrast table (2) |
| | 12 | Packing Sheet | RHC1023 |
| NSP | 13 | Warranty | See Contrast table (2) |
| NSP | 14 | Label | See Contrast table (2) |
| NSP | 15 | Label | See Contrast table (2) |
| NSP | 16 | Label | See Contrast table (2) |
| NSP | 17 | Label | See Contrast table (2) |

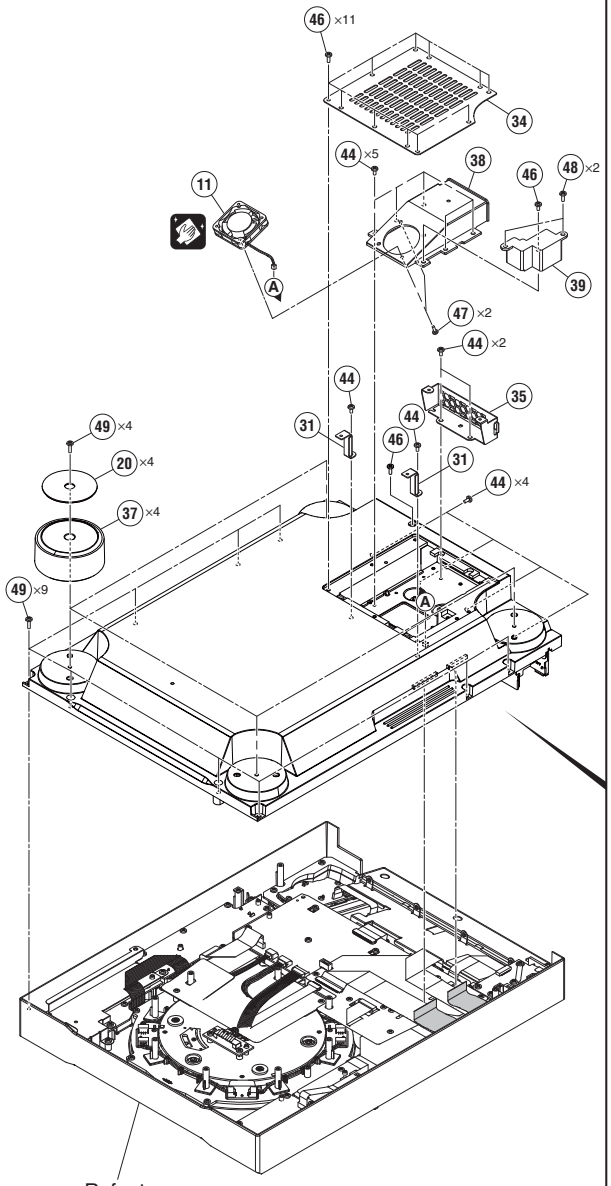
## (2) CONTRAST TABLE

CDJ-3000/AXJ, LSYXJ, UXJCB, CDJ-3000-W/AXJ, PXJ, UXJCB are constructed the same except for the following:

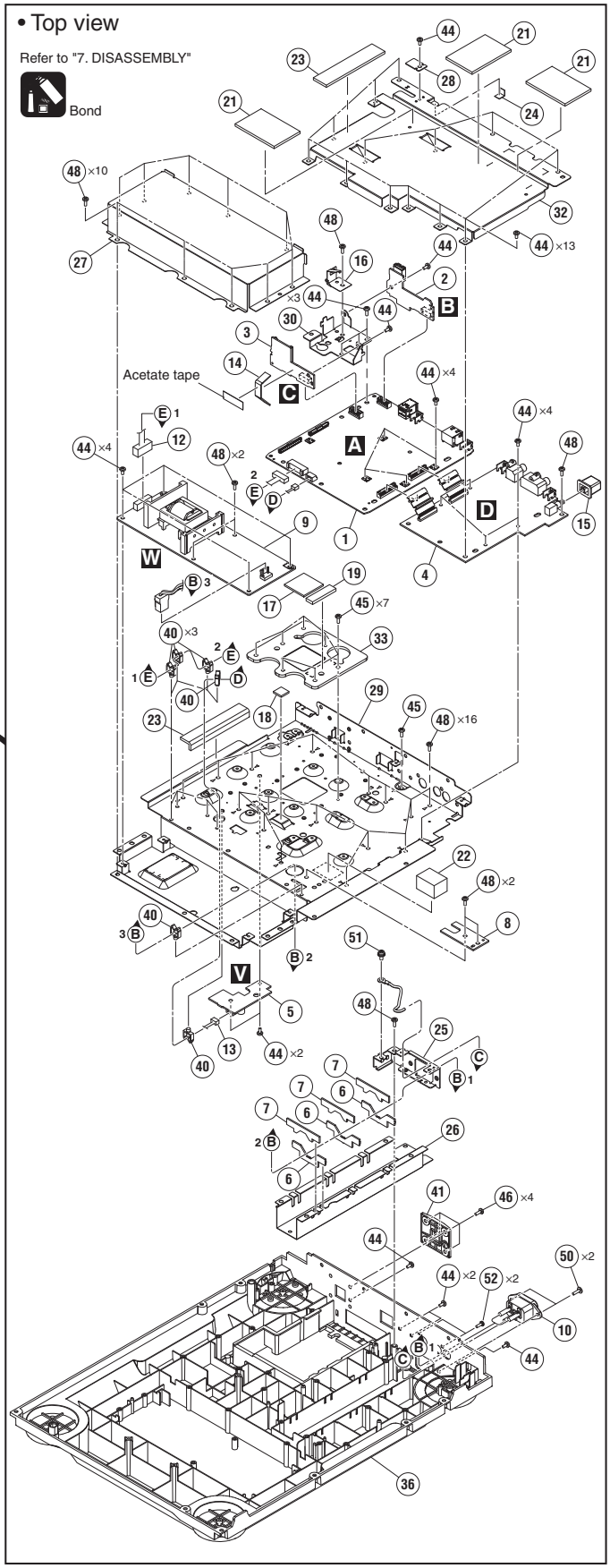
| Mark | No. | Symbol and Description | CDJ-3000 /AXJ | CDJ-3000 /LSYXJ | CDJ-3000 /UXJCB | CDJ-3000-W /AXJ | CDJ-3000-W /PXJ | CDJ-3000-W /UXJCB |
|---|---|---|---|---|---|---|---|---|
| ⚠ | 1 | Power cord | DDG1125 | DDG1124 | DDG1123 | DDG1125 | DDG1124 | DDG1123 |
| | 7 | Precautions for Use | DRH1535 | DRH1534 | DRH1534 | DRH1535 | DRH1611 | DRH1611 |
| NSP | 10 | Master Carton | DHG3763 | DHG3697 | DHG3764 | DHG3808 | DHG3806 | DHG3805 |
| | 11 | Packing Case | DHG3801 | DHG3801 | DHG3801 | DHG3809 | DHG3809 | DHG3809 |
| NSP | 13 | Warranty | Not used | DRY1274 | Not used | Not used | Not used | Not used |
| NSP | 14 | Label | DRW2951 | Not used | DRW2853 | DRW2983 | DRW2981 | Not used |
| NSP | 15 | Label | DRW2952 | Not used | Not used | DRW2984 | Not used | Not used |
| NSP | 16 | Label | DRW2953 | Not used | Not used | DRW2953 | Not used | Not used |
| NSP | 17 | Label | Not used | Not used | Not used | DRW2988 | Not used | Not used |

# 9.2 CHASSIS SECTION

• Bottom view




• Top view




NON-CONTACT SIDE
CONTACT SIDE
非接触面
接触面

## (1) CHASSIS SECTION PARTS LIST

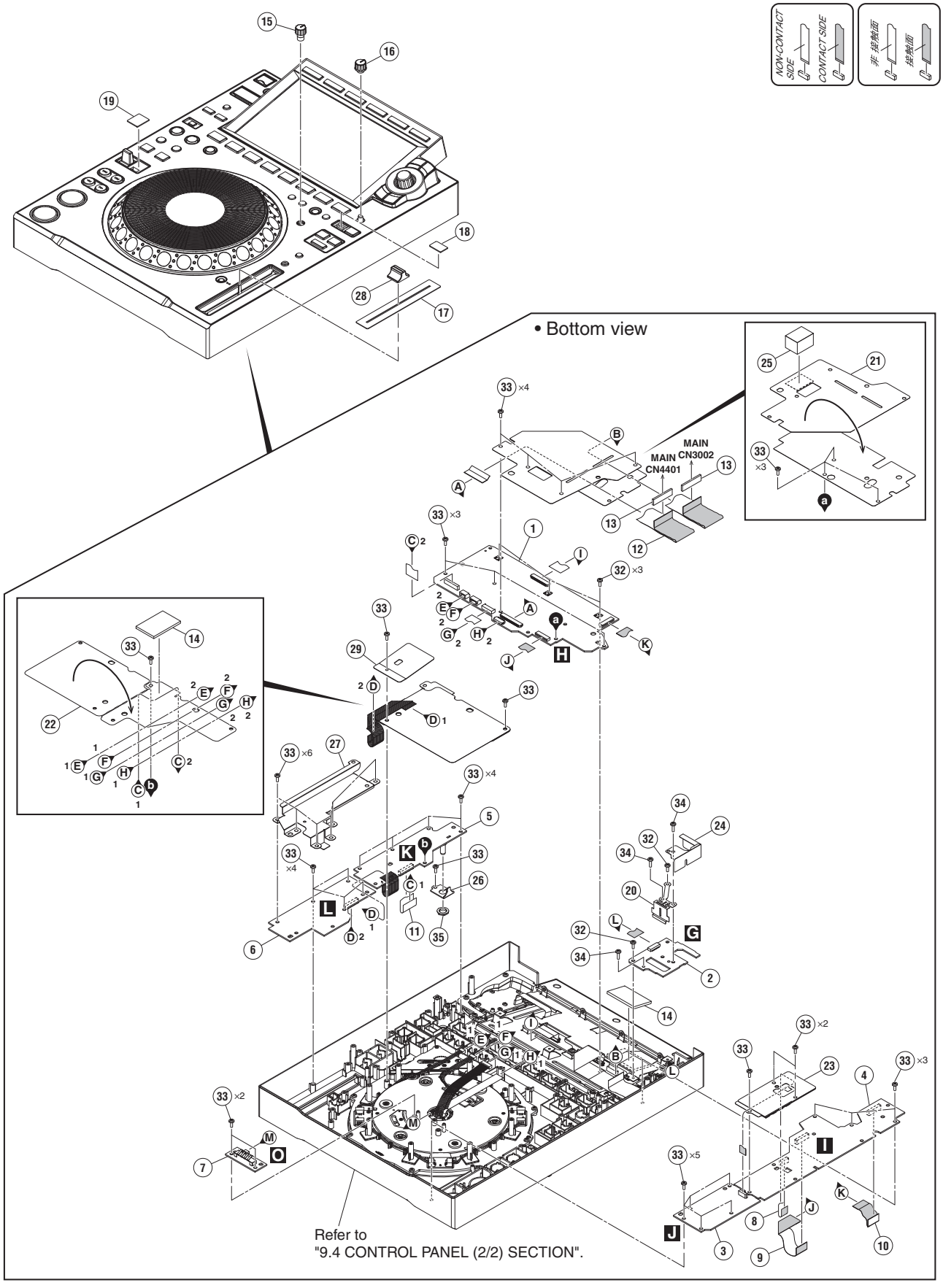
| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | MAIN Assy | DWX4229 |
| | 2 | USBA Assy | DWX4230 |
| | 3 | SDCB Assy | DWX4231 |
| | 4 | AUDB Assy | DWX4278 |
| | 5 | FANB Assy | DWX4267 |
| | 6 | SSK1 Assy | DWX4327 |
| | 7 | SSK2 Assy | DWX4328 |
| | 8 | SSK3 Assy | DWX4329 |
| ⚠ | 9 | SW POWER SUPPLY | DWR1548 |
| ⚠ | 10 | AC Inlet | DKP3991 |
| | 11 | Fan Motor | CXM1446 |
| | 12 | Crimp Connector | DDC1024 |
| | 13 | Crimp Connector | DDC1030 |
| | 14 | Ferrite Clamper | DTX1011 |
| | 15 | Power Knob | DAC2306 |
| | 16 | SD Earth Spring | DBK1357 |
| | 17 | Heat Cond Sheet | DEB2069 |
| | 18 | Heat Cond Sheet | DEB2071 |
| | 19 | Heat Cond Sheet | DEB2076 |
| | 20 | Cushion | DEC3838 |
| | 21 | Cushion | DEC3884 |
| | 22 | Cushion | DEC3921 |
| | 23 | Cushion | DEC3923 |
| | 24 | Gasket | DEC3919 |
| | 25 | Bracket/ACI | DNH3020 |
| | 26 | Shield Case | DNH3317 |
| | 27 | Shield Case | DNH3326 |
| | 28 | Stay | DNH3328 |
| | 29 | Stay | DNH3408 |
| | 30 | Stay | DNH3409 |
| | 31 | Stay | DNH3410 |
| | 32 | Shield Case | DNH3415 |
| | 33 | Heat Sink | DNH3419 |
| | 34 | Cover | DNH3420 |
| | 35 | Cover | DNH3421 |
| ⚠ | 36 | Chassis | See Contrast table (2) |
| | 37 | Insulator | DNK6852 |
| | 38 | Duct | DNK6854 |
| | 39 | Cover | DNK6893 |
| | 40 | Holder | VEC1355 |
| | 41 | Support | DNK6927 |
| | 42 | ••••• | |
| | 43 | ••••• | |
| | 44 | Screw | BBZ30P060FTB |
| | 45 | Screw | BBZ30P080FTC |
| | 46 | Screw | BBZ30P080FTB |
| | 47 | Screw | BPZ26P080FTC |
| | 48 | Screw | BPZ30P080FNI |
| | 49 | Screw | BPZ30P100FTB |
| | 50 | Screw | IBZ30P100FTB |
| | 51 | Screw | PMH40P080FTC |
| | 52 | Screw | PPZ30P080FTB |

## (2) CONTRAST TABLE

CDJ-3000 and CDJ-3000-W are constructed the same except for the following:

| Mark | No. | Symbol and Description | CDJ-3000 | CDJ-3000-W |
|---|---|---|---|---|
| ⚠ | 36 | Chassis | DNK6851 | DNK6984 |

# 9.3 CONTROL PANEL (1/2) SECTION



## (1) CONTROL PANEL (1/2) SECTION PARTS LIST

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | PNLB Assy | DWX4256 |
| | 2 | ILMB Assy | DWX4257 |
| | 3 | KSWB Assy | DWX4268 |
| | 4 | SUB1 Assy | DWX4264 |
| | 5 | SUB2 Assy | DWX4265 |
| | 6 | SLDB Assy | DWX4266 |
| | 7 | CONB Assy | DWX4269 |
| | 8 | FFC | DDD1914 |
| | 9 | FFC | DDD1915 |
| | 10 | FFC | DDD1916 |
| | 11 | FFC | DDD1917 |
| | 12 | FFC | DDD1921 |
| | 13 | Ferrite Clamper | DTX1011 |
| | 14 | Cushion | DEC3922 |
| | 15 | Knob | DAA1444 |
| | 16 | Knob | DAA1405 |
| | 17 | Slide Sheet 1C | See Contrast table (2) |
| | 18 | Panel | DAH3257 |
| | 19 | Panel | DAH3256 |
| | 20 | Leaf Spring | DBK1386 |
| | 21 | Sheet | DEC3841 |
| | 22 | Sheet | DEC3842 |
| | 23 | Sheet | DEC3927 |
| | 24 | Sheet | DEC3869 |
| | 25 | Cushion | DEC3921 |
| | 26 | Stay | DNH3412 |
| | 27 | Shield Case | DNH3416 |
| | 28 | Knob/SLD | See Contrast table (2) |
| | 29 | Barrier | DEC3932 |
| | 30 | ••••• | |
| | 31 | ••••• | |
| | 32 | Screw | BBZ30P080FTC |
| | 33 | Screw | BPZ30P080FNI |
| | 34 | Screw | BPZ30P100FTB |
| | 35 | Flange Nut M9 | DBN1008 |

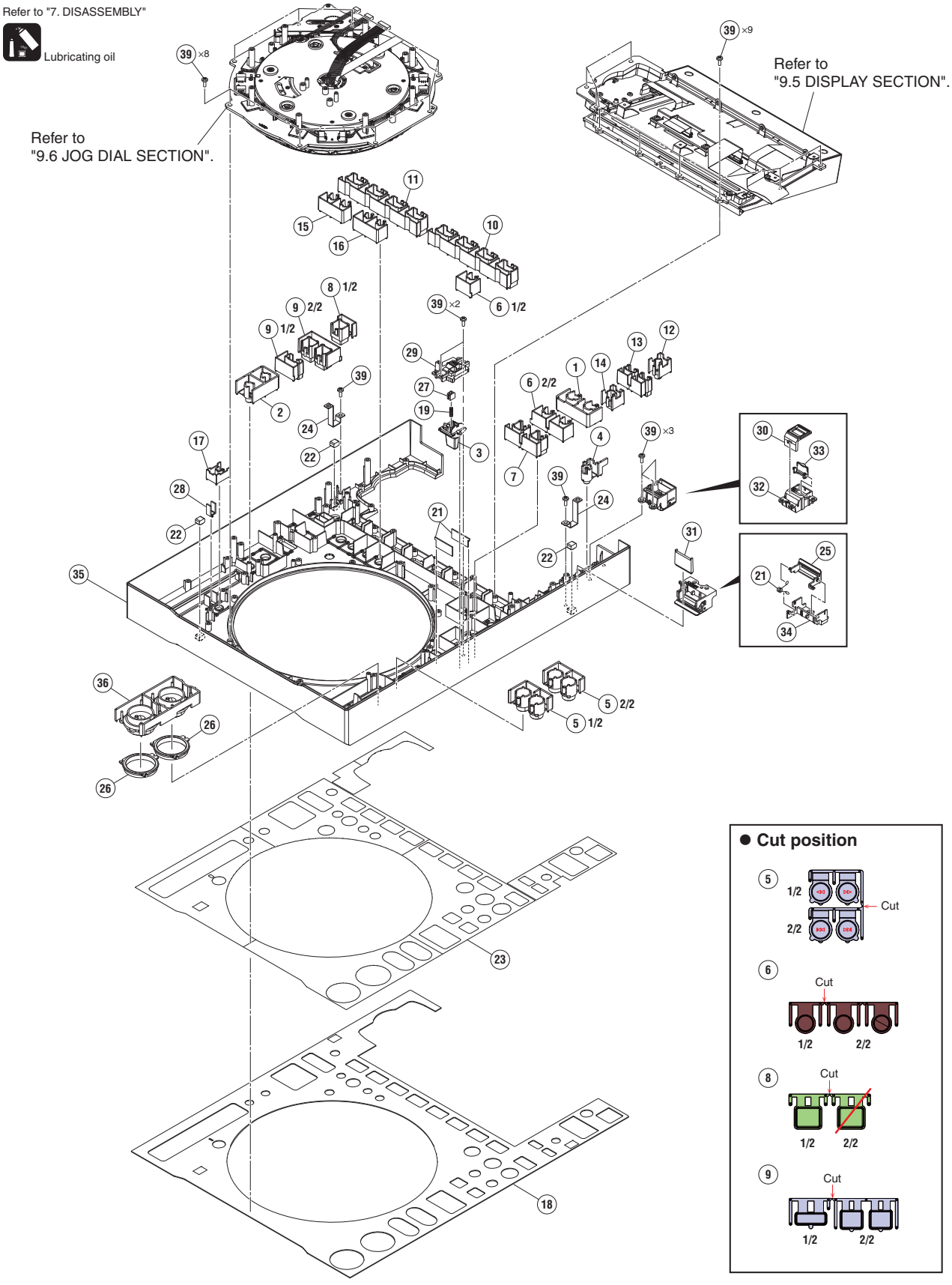
## (2) CONTRAST TABLE

CDJ-3000 and CDJ-3000-W are constructed the same except for the following:

| Mark | No. | Symbol and Description | CDJ-3000 | CDJ-3000-W |
|---|---|---|---|---|
| | 17 | Slide Sheet 1C | DAH2404 | DAH3193 |
| | 28 | Knob/SLD | DNK5981 | DNK6188 |

# 9.4 CONTROL PANEL (2/2) SECTION

• Bottom view



## (1) CONTROL PANEL (2/2) SECTION PARTS LIST

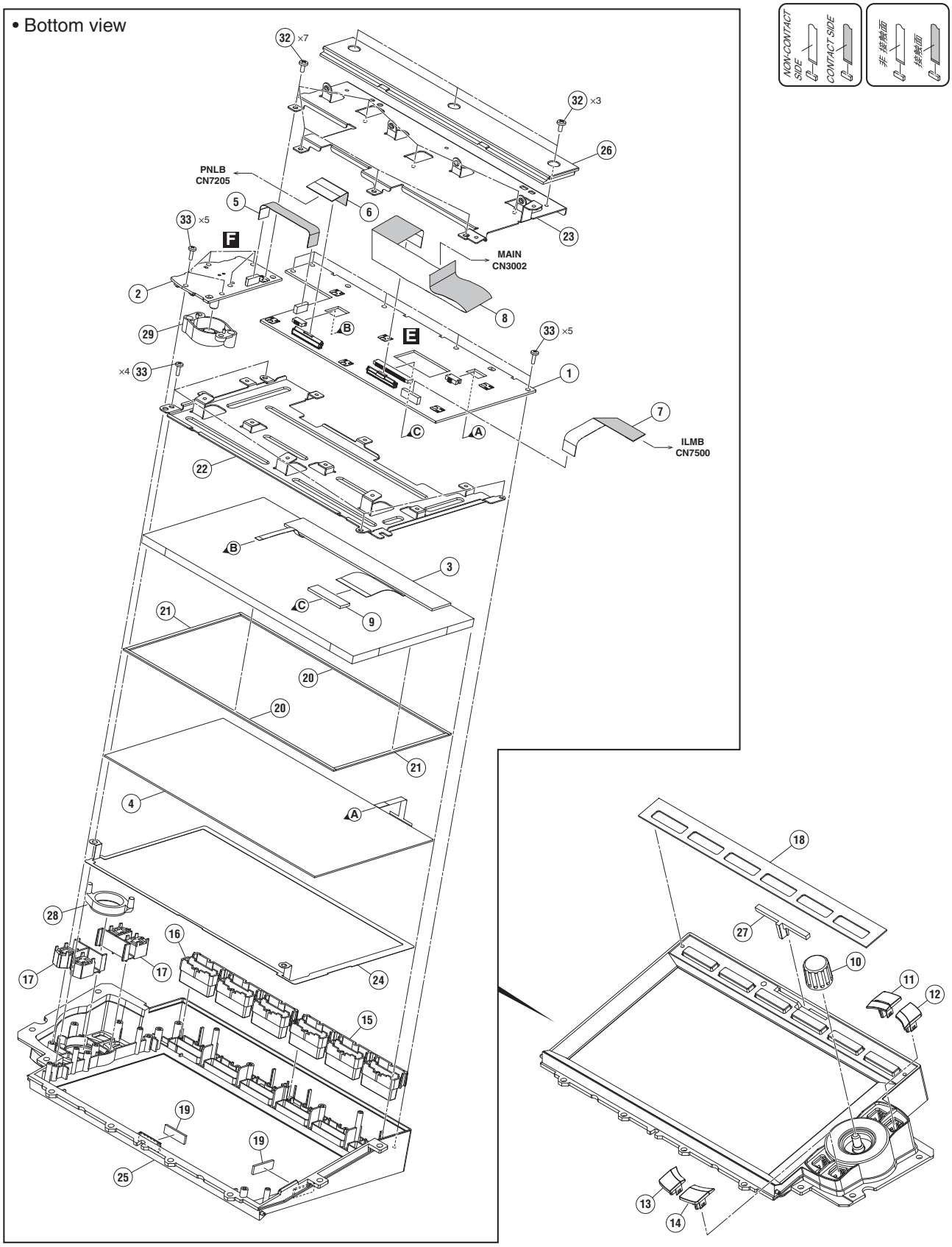
| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | Button (LOOP) | DAC2470 |
| | 2 | Button (TEMPO) | DAC2474 |
| | 3 | Lever | DAC3097 |
| | 4 | Button | DAC3134 |
| | 5 | Button | DAC3149 |
| | 6 | Button | DAC3463 |
| | 7 | Button | DAC3464 |
| | 8 | Button | DAC3465 |
| | 9 | Button | DAC3466 |
| | 10 | Button | DAC3467 |
| | 11 | Button | DAC3468 |
| | 12 | Button | DAC3469 |
| | 13 | Button | DAC3470 |
| | 14 | Button | DAC3472 |
| | 15 | Button | DAC3474 |
| | 16 | Button | DAC3475 |
| | 17 | Button | DAC3476 |
| | 18 | Panel | See Contrast table (2) |
| | 19 | Lever Spring | DBH1702 |
| | 20 | Spring | DBH1717 |
| | 21 | Brake | DEC3948 |
| | 22 | Gasket | DEC3719 |
| | 23 | DS ADH Sheet | DEH1107 |
| | 24 | Stay | DNH3413 |
| | 25 | SD Card Door | DNK5308 |
| | 26 | Ring Lens (PLAY) | DNK5315 |
| | 27 | Lever Cap | DNK5344 |
| | 28 | Lens | DNK5862 |
| | 29 | Base | DNK6470 |
| | 30 | Lens | DNK6931 |
| | 31 | Lens | DNK6937 |
| | 32 | Holder | DNK6496 |
| | 33 | Door | DNK6497 |
| | 34 | Holder | DNK6498 |
| ⚠ | 35 | Control Panel | See Contrast table (2) |
| | 36 | Button Unit | See Contrast table (2) |
| | 37 | ••••• | |
| | 38 | ••••• | |
| | 39 | Screw | BPZ30P080FNI |

## (2) CONTRAST TABLE

CDJ-3000 and CDJ-3000-W are constructed the same except for the following:

| Mark | No. | Symbol and Description | CDJ-3000 | CDJ-3000-W |
|---|---|---|---|---|
| ⚠ | 18 | Panel | DAH3258 | DAH3329 |
| | 35 | Control Panel | DNK6856 | DNK6971 |
| | 36 | Button Unit | DXB2197 | DXB2210 |

# 9.5 DISPLAY SECTION



## (1) DISPLAY SECTION PARTS LIST

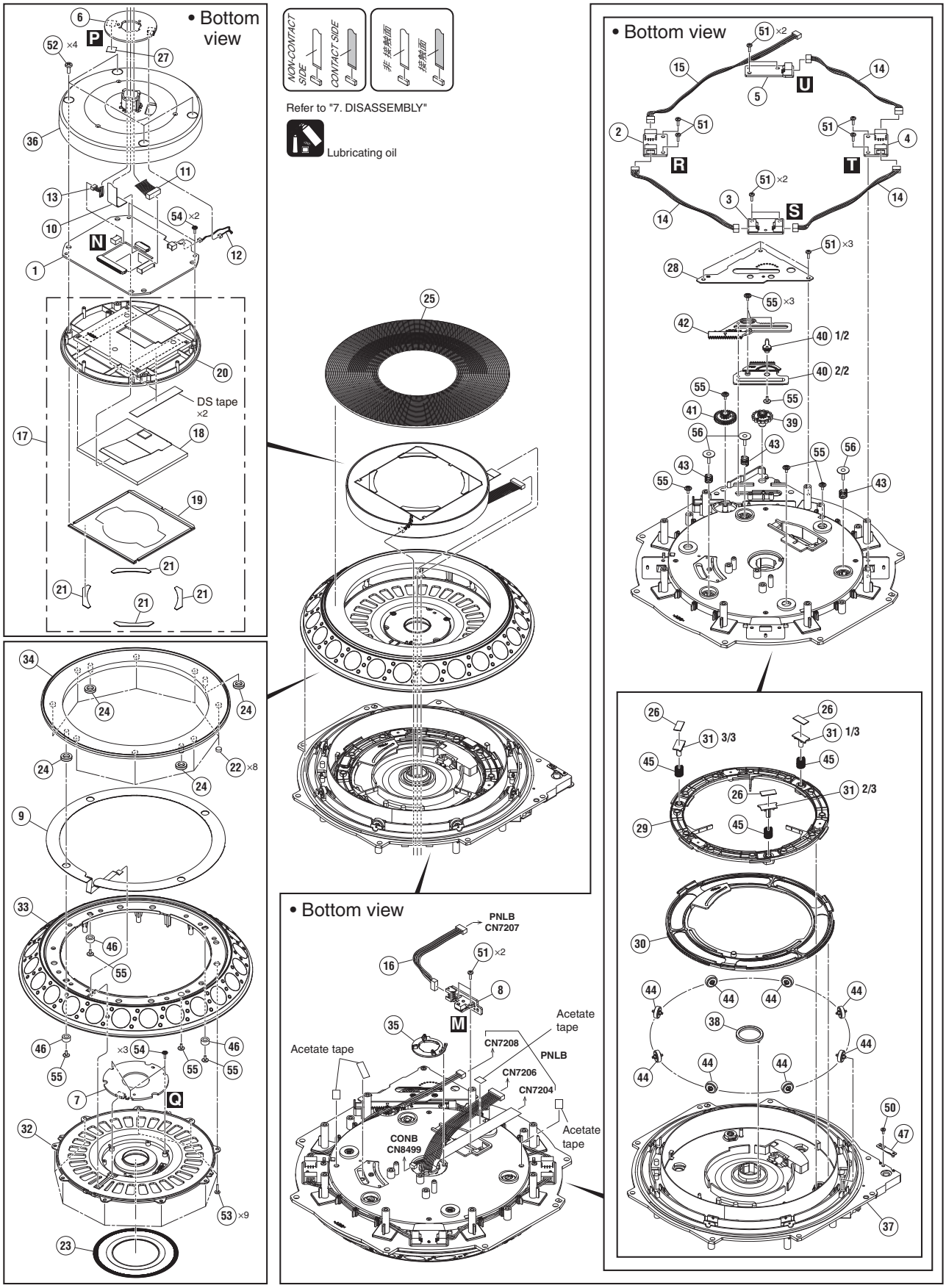
| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | MLCB Assy | DWX4281 |
| | 2 | ENCB Assy | DWX4326 |
| | 3 | TFT LCD | DWX4227 |
| | 4 | Touch Panel | DSX1145 |
| | 5 | FFC | DDD1918 |
| | 6 | FFC | DDD1919 |
| | 7 | FFC | DDD1920 |
| | 8 | FFC | DDD1922 |
| | 9 | Ferrite Clamper | DTX1011 |
| | 10 | Dial Knob | See Contrast table (2) |
| | 11 | Button | See Contrast table (2) |
| | 12 | Button | See Contrast table (2) |
| | 13 | Button | See Contrast table (2) |
| | 14 | Button | See Contrast table (2) |
| | 15 | Button | DAC3461 |
| | 16 | Button | DAC3462 |
| | 17 | Button | DAC3460 |
| | 18 | Panel | See Contrast table (2) |
| | 19 | Packing/LCD | DEC3565 |
| | 20 | Cushion | DEC3839 |
| | 21 | Cushion | DEC3840 |
| | 22 | Stay | DNH3411 |
| | 23 | Shield Case | DNH3417 |
| | 24 | Plate | DNH3422 |
| | 25 | Control Panel | See Contrast table (2) |
| | 26 | Cover | DNK6857 |
| | 27 | Lens | See Contrast table (2) |
| | 28 | Lens | DNK6859 |
| | 29 | Holder | DNK6860 |
| | 30 | ••••• | |
| | 31 | ••••• | |
| | 32 | Screw | BBZ30P060FTB |
| | 33 | Screw | BPZ26P080FTC |

## (2) CONTRAST TABLE

CDJ-3000 and CDJ-3000-W are constructed the same except for the following:

| Mark | No. | Symbol and Description | CDJ-3000 | CDJ-3000-W |
|---|---|---|---|---|
| | 10 | Dial Knob | DAA1246 | DAA1399 |
| | 11 | Button | DAC3457 | DAC3565 |
| | 12 | Button | DAC3459 | DAC3567 |
| | 13 | Button | DAC3485 | DAC3568 |
| | 14 | Button | DAC3458 | DAC3566 |
| | 18 | Panel | DAH3259 | DAH3331 |
| | 25 | Control Panel | DNK6855 | DNK6972 |
| | 27 | Lens | DNK6858 | DNK6985 |

# 9.6 JOG DIAL SECTION



## (1) JOG DIAL SECTION PARTS LIST

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | 1 | JLCD Assy | DWX4255 |
| | 2 | JILM1 Assy | DWX4258 |
| | 3 | JILM2 Assy | DWX4259 |
| | 4 | JILM3 Assy | DWX4260 |
| | 5 | JILM4 Assy | DWX4261 |
| | 6 | COIL1 Assy | DWX4262 |
| | 7 | COIL2 Assy | DWX4263 |
| | 8 | JOGB Assy | DWX4270 |
| | 9 | Sensor | DSX1139 |
| | 10 | FFC | DDD1913 |
| | 11 | Crimp Connector | DDC1032 |
| | 12 | Crimp Connector | DDC1033 |
| | 13 | Crimp Connector | DDC1034 |
| | 14 | Connector Assy | PF03PP-B12 |
| | 15 | Connector Assy | PF03PP-B17 |
| | 16 | Connector Assy | PF04PP-C10 |
| | 17 | 1..LCD Service Assy | DEA1122 |
| NSP | 18 | 2..TFT LCD | ••••• |
| NSP | 19 | 2..Cover | ••••• |
| NSP | 20 | 2..Holder | ••••• |
| NSP | 21 | 2..Sheet | ••••• |
| | 22 | SW Cushion HH48/2 | DEC2538 |
| | 23 | Slit | DEC3589 |
| | 24 | Cushion | DEC3807 |
| | 25 | Window | See Contrast table (2) |
| | 26 | Brake | DED1189 |
| | 27 | DS Tape | DEH1111 |
| | 28 | Cover | DNH3367 |
| | 29 | Base | DNK6774 |
| | 30 | Cam | DNK6775 |
| | 31 | Base | DNK6776 |
| | 32 | Jog Dial | DNK6777 |
| | 33 | Jog Dial | See Contrast table (2) |
| | 34 | Base | DNK6779 |
| | 35 | Holder | DNK6780 |
| | 36 | Holder | DNK6782 |
| | 37 | Holder | DNK6784 |
| | 38 | Shaft | DNK6785 |
| | 39 | Gear | DNK6786 |
| | 40 | Gear | DNK6787 |
| | 41 | Gear | DNK6788 |
| | 42 | Gear | DNK6789 |
| | 43 | Spring | DBH1816 |
| | 44 | Roller | DXB2178 |
| | 45 | Spring | DBH1817 |
| | 46 | Damper | DEB2083 |
| | 47 | Leaf Spring | DBK1394 |
| | 48 | ••••• | |
| | 49 | ••••• | |
| | 50 | Screw | BPZ20P040FTB |
| | 51 | Screw | BPZ20P060FTC |
| | 52 | Screw | BPZ30P080FNI |
| | 53 | Screw | IPZ20P080FTC |
| | 54 | Screw | IPZ20P060FTC |
| | 55 | Screw (FE) | DBA1265 |
| | 56 | Float Fastener | DBA1286 |

## (2) CONTRAST TABLE

CDJ-3000 and CDJ-3000-W are constructed the same except for the following:

| Mark | No. | Symbol and Description | CDJ-3000 | CDJ-3000-W |
|---|---|---|---|---|
| | 25 | Window | DAH3206 | DAH3330 |
| | 33 | Jog Dial | DNK6778 | DNK6973 |